

EAST INDIA (PROGRESS AND CONDITION).

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STATEMENT

EXHIBITING THE

MORAL AND MATERIAL PROGRESS AND CONDITION

OF

INDIA

DURING THE YEAR 1883-84.

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TWENTIETH NUMBER.

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(PRESENTED PURSUANT TO ACT OF PARLIAMENT.)

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India Office,  
25 November 1885.

J. A. GODLEY,  
Under Secretary of State for India.

# STATEMENT

EXHIBITING THE

## MORAL AND MATERIAL PROGRESS AND CONDITION OF INDIA

DURING THE YEAR 1883-84.

### I.

#### ADMINISTRATION, MUNICIPALITIES, AND LEGISLATION.

THE Earl of Kimberley was Secretary of State for India throughout the official year 1883-84. Mr. J. A. Godley, C.B., succeeded Sir Louis Mallet, C.B., as Permanent Under-Secretary in the autumn of 1883, and Mr. J. R. Bullen-Smith was appointed to the Council in June 1884. No statutes specially relating to India were passed during the year, and the majority of questions in either House of Parliament related to Central Asian affairs, Afghanistan, and the Iibert Bill.

The Marquis of Ripon, K.G., G.M.S.I., G.C.B., continued to be Viceroy and Governor General. The only change in the Council was the appointment of Sir Auckland Colvin, K.C.M.G., C.I.E., in succession to Major Evelyn Baring, R.A., C.S.I., C.I.E.

Sir Augustus Rivers Thompson, C.S.I., C.I.E., was Lieutenant-Governor of Bengal throughout the year. There was no important administrative change during the year. The funds raised under the Inland Emigration Act, of 1882, in Bengal, Assam, and the North-West Provinces, and hitherto under sole control of the Government of Bengal, were divided for administration by the several Governments concerned. And the principle of transferring the manufacture and sale of excise salt in the Orissa Division to the Commissioner of Salt Revenue, Madras, was accepted, but no final arrangements were made.

Mr. Charles Alfred Elliott, C.S.I., remained Chief Commissioner of Assam.

Sir Alfred Comyns Lyall, K.C.B., C.I.E., continued to exercise the functions of Lieutenant-Governor of the North-Western Provinces and of Chief Commissioner in Oudh.

The Punjab and its dependencies remained under the administration of Sir Charles Umpherston Aitchison, K.C.S.I., C.I.E.

Sir J. Morris, K.C.S.I., C.S., made over charge of the Chief Commissionership of the Central Provinces to Mr. W. B. Jones, C.S.I., C.S.

Mr. C. E. Bernard, C.S.I., went on leave in February 1883, and Mr. C. H. Crosthwaite acted as Chief Commissioner of British Burma during the official year under review.

Colonel E. R. Bradford, C.S.I., was Chief Commissioner of the Ajmere Merwara districts.

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ADMINISTRATION. Mr. J. G. Cordery was Resident at Hyderabad throughout 1883-84, and  
 Berar. Mr. S. O. B. Ridsdale officiated as Commissioner of the Hyderabad Assigned districts during the absence on furlough of Mr. F. Henvey.

Coorg. In Coorg, Mr. J. B. Lyall continued Chief Commissioner.

Madras. The Right Honourable Mountstuart Elphinstone Grant Duff, C.I.E., remained Governor of the Madras Presidency. Lieutenant-General Sir Frederick Roberts, Bart., V.C., G.C.B., C.I.E., was Commander-in-Chief, and Second in Council. Mr. C. G. Master, Provisional Member of Council, was appointed Ordinary Member of Council.

Bombay. The administration of the Bombay Presidency was conducted during 1883-84 by the Right Honourable Sir James Fergusson, K.C.M.G., C.I.E. Lieutenant General the Honourable Arthur Hardinge, C.B., continued to be Commander-in-Chief. At the close of the official year, Mr. E. W. Ravenscroft, C.S.I., retired from his seat in the Council.

MUNICIPALITIES. The reconstitution of municipalities on a wider basis of popular representation and the development of local self-government made active progress during the year 1883-84. The administration of schools, dispensaries, &c., was largely made over to the local bodies. Changes in the system of municipal taxation were also under discussion. Their general object is to provide more satisfactory substitutes for octroi, and to relieve trade from inconvenient imposts. Octroi however is still a large item among the receipts; this year it contributed 725,476 l. out of a total income from taxation of 1,766,235 l. The most important head of expenditure is that of public works, including maintenance and construction of roads, which accounted for 688,872 l. On medical and sanitary requirements 118,998 l. were disbursed against 109,507 l. in 1882-83. Conservancy and cleansing cost 358,132 l., and the total charges for establishment and collection rose from 234,292 l. to 242,376 l. The following table will show the income and expenditure for the various Provinces, together with the incidence of taxation and income:—

MUNICIPALITIES IN INDIA, 1883-84 (including Presidency Towns).

	India.	Bengal.	Assam.	North Western Provinces and Oudh.	Punjab.	Central Provinces.	British Burma.	Madras.	Bombay.	TOTAL.
Number of municipalities	15	179	5	100	202	61	31	47	165	894
Population within municipal limits.	No. 118,590	No. 3,382,644	No. 69,017	No. 3,087,719	No. 2,144,379	No. 677,271	No. 318,046	No. 1,729,818	No. 2,673,627	No. 14,211,111
RECEIPTS (excluding Balances):										
From taxation	£. 16,259	£. 459,683	£. 5,024	£. 206,503	£. 247,489	£. 62,848	£. 61,682	£. 161,461	£. 545,331	£. 1,766,235
From other sources	£. 4,943	£. 205,414	£. 7,876	£. 60,874	£. 58,070	£. 30,071	£. 181,268	£. 140,012	£. 357,011	£. 1,045,340
TOTAL Income	£. 21,202	£. 665,052	£. 12,700	£. 267,377	£. 305,559	£. 92,919	£. 242,950	£. 301,473	£. 902,342	£. 2,811,584
Incidence of taxation per head of population.	s. d. 2 8	s. d. 2 8	s. d. 1 5	s. d. 1 4	s. d. 2 3	s. d. 1 7	s. d. 3 10	s. d. 1 10	s. d. 4 1	s. d. 2 5
Incidence of income per head of population.	s. d. 3 7	s. d. 3 11	s. d. 3 8	s. d. 1 9	s. d. 2 10	s. d. 2 8	s. d. 15 4	s. d. 3 5	s. d. 6 9	s. d. 3 11
TOTAL Expenditure	£. 23,073	£. 717,263	£. 13,165	£. 273,729	£. 299,016	£. 86,226	£. 224,057	£. 283,643	£. 917,610	£. 2,837,982

Calcutta. Although municipal administration in Calcutta attracted more than the ordinary criticism and notice during the year, the attendance at meetings compared unfavourably with that in 1882-83. The work of the corporation was very varied. It included preparations for the reception of the Duke and Duchess of Connaught, negotiations for the lease of the Mahratta ditch, street improvements,

improvements, the detection of adulteration in articles of food exposed for sale, and improvement in the system of licensing hackney carriages. The attention of the Commissioners was drawn by the Bengal Government to the pressing necessity of obliterating foul tanks. A rough survey of the bustees was carried out, showing 206 to exist in Calcutta. Something was done towards cleansing them, but very little towards effecting structural improvements. Slow progress was also made with the extension of the drainage system, which it was expected should have been brought to a completion. Only 46,672 feet of sewers were laid down as compared with 109,158 feet in the previous 15 months. The water supply showed an increase, and attempts were made to prevent interception by connections nearest the head works of the entire supply. The birth-rate recorded for the year was 17·6 per mille. But the health officer believes that birth registration is still very defective, and this rate must be considered low, even taking into account the floating character of the population of Calcutta. The death-rate declined from 31 to 28·4 per mille, but the mortality from cholera was greater than in any year since 1870 except the previous one. The municipal income increased from 268,088 l. to 271,064 l., and the expenditure was 270,867 l. against 271,244 l. The Government debt was reduced by over 15,000 l., and the reserve of sinking fund rose to the nominal value of 255,938 l.

The Bengal Municipal Act (No. III. of 1884) was passed during the year, and came into force on 1st August. It marks an important stage in the development of local self-government in the Presidency. The old classification of municipalities has been discarded, unions and stations have disappeared, and the right of election has been given all towns considered fit for the introduction of municipal institutions. At the same time certain changes have been made as regards the assessment of taxes, conditions have been imposed respecting sanitary and conservancy affairs, and in order to safeguard the greater freedom of action accorded magistrates have received definite powers of control and restriction. The suburbs of Calcutta and the town of Howrah coming under the general provisions of the Act were thereby relieved as mofussil municipalities from contributing to the cost of the police. To meet this difficulty a special Act was passed authorising the payment of a portion of the police charges within these limits from municipal funds. Including the suburban municipality just mentioned there were 179 municipalities in the Presidency, or one less than last year. In future the Government will nominate the commissioners entirely in only 16; in the rest the majority of them will be elected by the ratepayers. The total number of commissioners was 2,305, of whom 489 were Europeans, and 1,816 natives; 566 officials and 1,739 non-officials.

Bengal.

The Assam municipal bodies still preserve the old Bengal classification. They are 13 in all; one first-class municipality, four second-class, and eight unions and stations. Election was introduced for the first time into six of them, and the division into wards was adopted. The property qualification is various, and the simple system of numerical representation has been partially modified to secure the interest of special religious minorities. In Sylhet only 194 out of 1,176 electors failed to avail themselves of their privileges, and the proportion of voters on the lists to those who actually took part in the elections was nowhere below 77 per cent. The expenditure was chiefly devoted to minor public works, though one important undertaking was begun at Gauhati, the construction of a pure water supply. Receipts from taxation rose, except under the heads of boats and ferries, owing to the severe floods of the season.

Assam.

The number of municipalities in the North Western Provinces and Oudh rose from 107 to 109, and the number of people living within municipal limits from 2,849,618 to 3,087,719. Out of a total available income of 335,316 l., including the balance of previous years, 273,728 l. were spent. Lighting was introduced for the first time in Fyzabad, and completed in Lucknow; a town hall was built at Cawnpore, and a water supply scheme arranged for Allahabad. Measures were taken for relieving municipalities of the cost of provincial police, and corresponding charges on account of schools and dispensaries were imposed. The question of protecting through trade under the octroi system received attention. Where it was found that articles could not be efficiently protected by refunds the duty was abolished, and in six towns octroi was given up. Besides

N. W. Provinces and Oudh.

municipalities

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MUNICIPALITIES. municipalities in the proper sense of the word, 337 other towns, containing a population of 1,631,372, were administered under the Chaukidari Act of 1856. They raised an income of 32,592 *l.*, expended upon police, conservancy, and minor public works.

Punjab. The number of municipalities and their classification was the same as before, viz., 202 municipalities; eight of the first, 20 of the second, and the remainder of the third class. The substitution of partially elected for wholly nominated committees was begun. In 1882-83 only three municipalities had even partially elected committees. At the close of last year five had committees of which all the members had been elected, and five had mixed committees. But while the Government has been active in introducing elective committees wherever the change seems practicable, it has become impressed with the necessity of withdrawing the municipal system altogether from many petty towns. In these it seems impossible to replace octroi by any other form of taxation, and the octroi tax is liable to abuse and is a serious impost on trade. But though abolished as separate bodies these municipalities will be continued by their incorporation into new district and local boards. The population within municipal limits in the Punjab is considerably over two millions. The total income of the municipalities was 305,559 *l.*, and the total expenditure, 299,016 *l.*

Central Provinces. There were 61 municipalities in the Central Provinces. The elective system was largely extended. In future the elected municipal commissioners will stand in the proportion of two-thirds to the nominated members, and the *ex-officio* members will cease to exist. To facilitate the change the election rules are being revised, and a property qualification introduced. The new arrangements will be in working order generally by next year. The octroi schedules have also been remodelled, as octroi contributes no less than 70,912 *l.* out of the total municipal income of 92,927 *l.* The principle kept in view is to pare away the numerous sub-headings, and to restrict the levy of octroi to the main articles of consumption. The control of schools, vaccination, dispensaries, &c., is gradually being transferred to the municipalities, and at Nagpur and Jubbulpore a beginning has been made with public works.

Burma. As legislation for placing the whole machinery of local self-government on a more satisfactory basis was under discussion, no change was made during the year in municipal organisation. But Pegu was constituted a municipality towards the close of the year, thus bringing the number of municipalities up to eight, and reducing that of town committees invested with quasi-municipal powers from 24 to 23. A satisfactory account is given of the working of the elected commissioners. The gross income of the municipal bodies increased largely, and all are in a prosperous financial condition, except Moulmein. Here the expenditure has been lavish and ill-judged, and the municipality was obliged to obtain a grant from the provincial funds to prevent its prosperity being attacked by the Civil Court.

To the Burmese municipalities is entrusted the entire control of education, of public health and of the medical institutions within their limits. The Vaccination Act was extended to Akyab, but the value of sanitation is only being gradually learnt. The principal public works were the completion of the Rangoon water system, while the drainage and embankment operations at Prome approached their termination. The largest item in an expenditure of 224,057 *l.* was 97,278 *l.*, devoted to public health.

India. The municipalities under the Government of India have not yet developed Berar. into representative institutions. In Berar there are six municipalities, and the commissioners are all nominated, but a general organisation of local self-government is under discussion, and a provisional system of election will be introduced next year into one town. The population within municipal limits numbers over 100,000, and the income is steadily rising. In 1883-84 it amounted to 21,202 *l.* the largest portion being derived from market fees. In Coorg the control of the dispensaries and of primary schools within their limits was made over to the municipalities of Mercara and Virarajendrapet, and rules have been drawn up for conducting an election in the former town. The Act to make vaccination compulsory was extended to four out of the five Coorg municipalities. The total income at their disposal this year was 3,339 *l.* It is chiefly contributed by

by a house-tax, and there are now over 17,000 people living within municipal limits in the province. MUNICIPALITIES.

The Madras Municipal Act (Act I. of 1884) was passed during this year, but did not come into effect till its close. It remedies several verbal defects in the older Act, and provides for greater attention to sanitary affairs, as well as for the conservancy of the shores of the Red Hills Lake. A further loan of three lakhs was authorised and partly raised to continue the Black Town drainage works, which were begun in 1882 with a loan of one lakh contracted that year. Of the total sum borrowed 24,327 l. have already been expended. The extension of the water supply, also undertaken in 1882, was completed at a total cost of 26,824 l. Complaints have been made that it diminishes the supply of water for house service, and the question of the general increase of the water supply of the town is forcing itself upon consideration. Vaccination was performed upon 50,000 people in round numbers, or over a third more than last year. Small-pox was, however, prevalent, and the death-rate advanced from 38·9 to 39·8 per mille, while the birth-rate declined. The total receipts of the municipality were 140,450 l., and the closing balance was 1,868 l. Madras City.

The number of mofussil municipalities remained at 27. The privilege of election was extended to all towns of more than 25,000 inhabitants, and elections held in nine municipalities for the first time excited a commendable amount of interest. Out of 754 commissioners 440 were non-official, and 506 were natives, against 248 Europeans and Eurasians. Public works were chiefly confined to improving communications, but Madura and Cuddalore have undertaken considerable schemes for providing drinking water. All the municipal towns are now lighted, with the exception of Chicacole. The policy of placing primary schools under municipal management is reported to work very well. A sum of 15,000 l. was spent this year on education, and much local attention was devoted to the schools. The income showed an increase of 3,212 l., chiefly under the head of the tax on carts and vehicles, which is equivalent to the octroi levied in other provinces. Madras Presidency.

Considerable progress was made by the Bombay Municipality towards improving the water supply. The sanction of the Government of India towards raising a loan of 208,800 l. for this purpose was received. The construction of filter-beds in the Malabar Hill Reservoir was completed. Catchment channels were made on the slopes above the Vehar Lake, and the Tulsi dams were raised. Unfortunately, the Vehar main burst during the year, and the health officer partly attributes the outbreak of cholera to the temporary failure in the water supply thus occasioned. The season, generally, was a very unhealthy one; during the first nine months of the year the death rate averaged 30·79 per mille, though it afterwards declined to 24·12. The increased mortality was chiefly due to cholera and to small-pox, which was very severe. Great efforts were made to extend vaccination, and a hospital camp was formed. The number of births and deaths registered were, respectively, 16,631 and 25,430. The change in keeping the accounts for the financial instead of the calendar year prevents any exact comparison of the income and expenditure of 1883-84 and previous years. The total revenue, 373,727 l., exhibits a general tendency to increase, especially under the heads of liquor licenses, water rate, and town duties. The total expenditure was 371,581 l. The incidence of municipal taxation per head in Bombay City was 6 s. 5 d. Bombay City.

Municipal institutions in the Presidency were profoundly modified by Act II. of 1884, which may be considered as the complement of the important Local Funds Bill still under discussion. The distinction between city and town municipalities was abolished, and the elective system greatly extended. In future half the municipal commissioners are to be elected, and of the remainder not more than one-half are to be salaried servants of Government; where, moreover, the Government nominates a chairman, the ratepayers are allowed to select the vice-chairman. In anticipation of the Act election was introduced during the year into 14 municipalities. The working of the new system was on the whole satisfactory, but the commissioners generally are still very lax in their attendance. Loans were taken up for the construction of waterworks in the Satara, Junnar, and Chiplun municipalities, and good progress was made in road-laying and the improvement of markets. The incidence of the octroi taxation in the towns where it was levied came to nearly 2 s. per head of the population. In Bombay Presidency.

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### MUNICIPALITIES.

one or two cases a house-tax has been substituted for it. Direct taxation showed a distinct improvement. The increase in revenue was most conspicuous in Sind. It is attributed to the house-tax on the extensive new-buildings in Karachi and Sukkur, where the expansion of the volume of trade from the Punjab steadily attracts new inhabitants.

### LOCAL SELF-GOVERNMENT.

#### Bengal.

Local self-government in Bengal still remained in a condition of suspense but the new Local Self-Government Bill passed through the preliminary stages and was reported on by the Committee. The local boards will be constituted by a mixed system of election and nomination, and will be invested with certain executive functions. In 1883-84, as in previous years, their work was confined to administering the road cess. Under Municipal Act III. of 1884 the old municipal unions have either been constituted full municipalities or cleared away. Where the latter has been the case new union committees are to be formed which shall act as agents of the local boards, and the surplus funds of the old municipal unions have been retained pending their establishment.

#### Assam.

In Assam no important change was introduced in the organisation of the local boards, but the relations of different officers to them was defined, and the system was generally consolidated. The total funds which they administered came to 142,033 £, or more by 17,808 £ than in the previous year. Sixty-one per cent. of this sum is contributed from the provincial revenue; the local funds proper brought in 55,457 £. The main expenditure was on roads, and there is some fear that education and other objects which affect the native community more immediately than the Europeans may be unduly neglected. Nearly 21 per cent. of the local funds proper was, however, devoted to education.

#### N. W. Provinces and Oudh.

A complete system of local self-government was constituted in these provinces during the year, under Act XIV. of 1883, but it has not yet come into operation. What was done was to notify the date at which district and local boards should come into existence, and to draw up rules for elections, &c. Next year a report on the actual working of the Act will be presented. As far as regards local self-government the Punjab is somewhat ahead of the North-West Provinces. The District Boards Act has already been introduced into 21 districts, and successful elections have been held in 14, much interest being generally evinced in them. The local rate in the districts where the Act is in force has been consolidated with the other cesses. Proposals for extending the area in which elections are held is now under consideration.

#### Punjab.

#### Central Provinces.

The first district council in the Central Provinces was formed at Nagpur in October 1883. There were last year 15 district councils and 48 local boards, the backward district of Mandla being excepted from the provisions of the Local Self-Government Act. The district councils are composed of 280 members, of whom 247 are non-official, and the local boards of 767 members, of whom 709 are non-official. Some progress was made in arranging for the transfer of schools, dispensaries, roads, &c., to the control of the local boards, but the constitution of the new district funds has been postponed to next year. Meanwhile the boards were busy with the work which as yet has been allotted them, viz., the management of markets, tanks, ferries, rest-houses, &c.

#### Burma.

In Burma cesses are levied for local objects, but local funds are really treated as part of the provincial funds, and there is no system of representation. A Local Self-Government Bill was under discussion however, and was passed at the close of the year as the Burma Municipal Act.

#### Madras.

The number of local fund circles in Madras remained at 30, and their constitution was unaltered. Their total receipts, including the opening balance, amounted to 839,923 £, of which 577,590 £ were expended (386,326 £ of this being on public works); while 384 miles of road were constructed, and the number of dispensaries was raised from 190 to 205.

#### Bombay.

The Bill introduced into the Bombay Legislature in 1883 to "amend the law regulating the constitution and the powers and duties of the local committees" was passed during the year as Act I. of 1884. It provides for the election of one-half of the members of district and taluka boards, and allows the latter some amount of executive independence. The receipts of the incorporated local funds rose from 404,000 £ to 420,051 £.



PROGRESS AND CONDITION OF INDIA, 1883-84.

Twenty-two Acts received the assent of the Governor General during the LEGISLATION. official year 1883-84.

Nine of these were general in their application, and 13 local. The general India. Acts were—(1) the Protection of Inventions Act, to protect the inventors of new manufactures exhibiting them at exhibitions in India; (2) the Native Passenger Ships Act, to provide for the better regulation of the passenger traffic between British India and the ports in the Red Sea; (3) an Act to amend the Cattle-Trespass Act of 1871, giving power to Provincial Governments to transfer the administration of the Act to local authorities; (4) the Land Improvement Loans Act, 1883, consolidating and amending the law relating to loans of money by the Government for agricultural improvements; (5) the Indian Emigration Act, to amend the law relating to the emigration of natives of India; (6) the Criminal Procedure Code Amendment Act; (7) the Indian Explosives Act; (8) and (9) the Inland Steam Vessels Act and the Indian Steamships Act, both providing for the survey of steamships and the grant of certificates to engineers, the application of the first being limited to inland waters.

The Acts having local application only were—for Bengal: (10) amending the Chutia Nagpur Encumbered Estates Act; for the North-Western Provinces and Oudh: (11) to constitute local boards; (12) to make better provision for the organisation and administration of municipalities; for the Punjab: (13) giving effect to an award made in a dispute between Sardar Brikrama Singh, and the Kaporthala State; (14) to amend the law providing for the constitution of local self-government; (15) to declare the law in certain lands ceded by the State of Bahawalpur for the Indus Valley State Railway; for the Central Provinces: (16) to consolidate and amend the law relating to agricultural tenancies; for British Burma (17) transferring the little Cocos and Preparis Islands from the administration of the superintendent of the Andaman and Nicobar Islands to that of the Chief Commissioner; (18) providing for the licensing and control of pilots; (19) to authorise the construction of tramways in Rangoon; for Bombay: (20) to reduce the port dues in the port of Bombay; for Madras: (21) to facilitate the partition of certain immovable property; and (22) an Act to amend the law relating to the granting of honorary degrees by the Universities of Calcutta, Madras and Bombay. Provincial.

The most important measure passed by the Bengal Legislature during the Bengal. year was (23) an Act to amend and consolidate the law relative to municipalities. Four other Acts were also passed: (24) to amend the Pooree Lodging House Act; (25) to amend the Calcutta Tramway Act; (26) to enable the municipal commissioners of Howrah and the suburbs of Calcutta to contribute towards the cost of the police employed in those municipalities; (27) to amend the Calcutta Municipal Consolidation Act.

Four Acts were passed by the Madras Legislature, one of which, (28) providing Madras. for the conduct of business by the Board of Revenue, partially introduced the "portfolio" system. The remainder were—(29) to make provision for the levying of port dues within the port of Cocanada; (30) to raise the pecuniary limits of the civil jurisdiction exercised by village munsifs; (31) to provide for the better management of the municipal affairs of the City of Madras.

The Bombay Legislature passed five Acts: (32) to further amend the Bombay Bombay. Port Trust Act; (33) to amend the law concerning the confinement of civil prisoners liable to imprisonment under the Criminal Procedure Code; (34) to enable the Government to prescribe the official seals of public authorities; (35) to further amend the Bombay Port Trust Act; (36) to provide for the administration of local funds.

(1) Act XVI. of 1883.  
(2) Act XXI. of 1883.  
(3) Act VII. of 1884.  
(4) Act X. of 1883.  
(5) Act VIII. of 1883.  
(6) Act II. of 1884.  
(7) Act II. of 1884.  
(8) Act III. of 1884.  
(9) Act IV. of 1883.

(10) Act XVII. of 1883.  
(11) Act III. of 1884.  
(12) Act V. of 1884.  
(13) Act XX. of 1883.  
(14) Act XII. of 1883.  
(15) Act I. of 1884.  
(16) Act IV. of 1884.  
(17) Act IV. of 1884.  
(18) Act IV. of 1884.  
(19) Act V. of 1883.

(20) Act XVIII. of 1883.  
(21) Act IV. of 1884.  
(22) Act XIV. of 1883.  
(23) Act XIII. of 1883.  
(24) Act XXII. of 1883.  
(25) Act III. of 1884.  
(26) Act V. of 1884.  
(27) Act I. of 1884.  
(28) Act VI. of 1883.

(29) Act XIX. of 1883.  
(30) Act VI. of 1884.  
(31) Act XV. of 1883.  
(32) Act IX. of 1883.  
(33) Act XI. of 1883.  
(34) Act I. of 1884.  
(35) Act II. of 1884.  
(36) Act III. of 1883.  
(37) Act I. of 1884.

II.

JUSTICE, PRISONS, AND POLICE.

CRIME.

THE constitution of the Criminal Courts is uniform throughout India, and is regulated by the Criminal Procedure Code of 1872 amended in 1882. The various courts in operation are, (1) The High Courts; (2) Courts of Session; (3) Courts of Presidency Magistrates; and of Magistrates of the First Class; (4) Courts of Magistrates of the Second Class; (5) Courts of Magistrates of the Third Class. Inverting the order, the Magisterial Courts are graduated according to the maximum sentences of fine, imprisonment, and whipping, which they are empowered to inflict. Magistrates of the highest class further commit prisoners on graver charges to the Sessions Court or High Court. The Sessions Judge may pass any sentence authorised by law, but sentence of death must receive the confirmation of the High Court, which is supreme, or in some provinces of the Chief Court or Judicial Commissioner in its place. The Sessions Judge also holds trials as a rule with the assistance of three assessors, but trial by jury has been extended to certain districts and certain classes of crime. Trial before the High Court is always by jury.

The following statement will exhibit the comparative criminal statistics of the last two years. Statistics of criminal trials, according to Provinces, for the calendar years 1882 and 1883.

		Criminal Trials.				Appeals on Revisions in Criminal Cases.			Persons Sentenced to				
		Persons brought to Trial.	Number Acquitted or Discharged.	Number Convicted.	Otherwise Disposed of and Pending.	Number of Appeals, &c.	Number of Appeals Rejected.	Number of Sentences Confirmed.	Death.	Transportation.	Imprisonment.	Fine.	Whipping.
Bengal	1882	222,109	67,848	144,926	9,935	14,600	3,765	5,152	30	103	27,104	109,274	1,611
	1883	234,203	71,777	153,053	9,373	16,729	4,662	5,955	31	182	25,890	115,273	1,300
Assam	1882	15,752	5,033	10,008	621	1,080	332	410	2	14	3,223	6,849	204
	1883	17,035	6,029	10,278	728	1,550	335	657	2	19	3,553	6,905	240
North-Western Provinces and Oudh	1882	241,961	108,501	125,923	7,537	18,823	6,768	6,425	127	320	34,471	85,130	6,649
	1883	246,849	118,931	121,150	6,609	23,214	8,090	7,640	118	328	33,910	81,721	6,156
Punjab	1882	181,908	98,447	78,514	5,637	12,179	4,624	3,061	64	186	15,556	59,303	1,878
	1883	188,140	107,255	76,320	5,517	15,258	5,511	4,374	64	160	15,094	59,693	1,650
Central Provinces	1882	42,127	15,584	25,360	913	2,172	522	609	24	47	7,330	15,594	1,983
	1883	39,816	17,108	21,747	961	2,566	609	1,033	22	42	6,898	13,128	1,460
British Burma	1882	42,275	16,212	24,840	1,223	1,607	439	575	43	07	7,287	17,349	788
	1883	47,739	18,101	28,107	1,531	2,344	1,227	217	63	203	9,331	18,976	860
Berar	1882	20,086	10,000	9,578	238	691	129	199	6	32	1,842	8,293	360
	1883	20,792	11,299	9,277	326	661	158	176	1	6	1,695	7,968	250
Bangalore	1882	3,097	919	2,141	97	81	6	14	1	-	186	1,847	108
	1883	2,541	783	1,684	72	24	-	12	-	1	172	1,424	86
Ajmere	1882	7,882	4,193	3,400	289	108	-	56	1	5	488	3,053	08
	1883	No information.	-	-	-	-	-	-	-	-	-	-	-
Coorg	1882	2,333	1,251	1,024	58	68	7	36	-	-	226	658	52
	1883	2,336	1,215	1,067	54	87	-	45	1	2	107	678	24
Madras	1882	320,603	154,068	166,012	8,923	12,249	807	5,490	57	145	33,767	132,661	2,344
	1883	335,752	159,769	156,846	19,147	13,839	1,511	6,008	35	166	32,535	125,123	1,307
Bombay	1882	113,881	50,088	50,297	3,956	5,745	792	2,681	60	148	13,888	39,021	844
	1883	116,764	71,553	41,408	3,713	6,541	838	3,476	51	103	12,925	30,875	590
TOTAL	1882	1,223,104	542,704	642,233	38,167	69,461	18,247	24,708	417	1,157	154,497	470,229	16,880
	1883	1,251,967	583,865	621,047	46,827	83,376	23,341	30,077	388	1,272	142,100	459,767	13,913

The statistics for Bengal show that the year was a normal one. There was an increase in the number of persons brought to trial, but this was chiefly in respect of offences against special and local laws, affecting public health. The serious crime was about the same as in the previous year. No alteration was made either in the area to which trial by jury has been extended, or in the class of crime. Complaints are still made of the unwillingness of juries to convict, but they show a decided improvement in this respect. The number of stipendiary and honorary magistrates, except in Calcutta where there was a slight change, remained as before.

Crim. Bengal.

In Assam the work of the criminal courts is steadily increasing, though a large proportion of complaints are rejected off-hand. The increase this year chiefly comes from the district of Sythet, and is accounted for by quarrels over crops and grazing-lands during the protracted floods. The intimate connection between crime, and the proportion of immigrant tea-garden labourers in the districts is also notable. Where the immigrants are strong offences are numerous.

Assam.

Some changes of importance were made in the North West Provinces and Oudh during the year. A legal remembrancer was appointed who will be able to watch and control litigation in which the Government is interested in greater detail than the Board of Revenue, on whom that duty has devolved since 1876. A Public Prosecutor was also nominated in order that the Government might be more completely represented in criminal work. In minor cases the Junior Government Pleader will appear as before. The number of offences decreased both in the North West Provinces and in Oudh. Great assistance was rendered by the unpaid magistracy, the bench of honorary magistrates at Lucknow alone disposing of more than 4,000 cases.

N. W. Provinces and Oudh.

There was an increase in the Punjab in the number of offences reported, partly attributable to the greater care taken by the police in recording complaints. But the increase was chiefly under the minor heads of crime; robberies and dacoities fell off. Offences relating to religion are more frequent in the Punjab than in the North West Provinces or in Bengal, and are on the increase. There was a satisfactory reduction of prosecutions under the Indian Arms Act.

Punjab.

Both the police statistics and the returns of the criminal courts show a satisfactory decrease in crime in the Central Provinces spread over all the main heads of offences. The standard of punishment was somewhat severer than before, but is still very moderate. The honorary magistracy, which is very active in the Central Provinces, dealt with no less than 25 per cent. of the persons brought to trial.

Central Provinces.

Crime is still on the increase in Burma and the greater number of dacoities and robberies is unsatisfactory. The proportion of convictions, however, before all courts was higher than before, and a tendency to inflict severer punishments was observable, as the attention of judicial officers had been called to the necessity of awarding adequate sentences to heinous offenders. Benches of honorary magistrates are now at work in most of the principal towns, but the great majority of cases still fall to the subordinate stipendiary magistrates.

Burma.

Excepting under the head of dacoities there was a marked falling off in the number of offences, especially those of the more serious kinds, reported to the courts in Berar. The extreme leniency of the punishments inflicted bears out the insignificant character of the crimes committed. In Coorg the reverse obtained as far as the number of crimes was concerned. Few, however, were of a serious nature, and most were offences against special and local laws. The number of criminal courts was raised from 23 to 25.

Berar.

Coorg.

In Madras there were about the same number of offences both against the penal code and against special laws as in the preceding year. But it is noticeable that under the first head offences against the public tranquillity, which had been exceptionally numerous in 1882, sunk to the normal figure. Offences against the public health increased largely. This is attributed to the unhealthiness of the season which provoked more sanitary action. Under special laws offences against salt regulations showed a satisfactory decline. The criminal work of the appellate courts is steadily on the increase. The High Court alone received 508 appeals, against 434 in 1882.

Madras.

Only 87,039 offences were reported in Bombay against 93,798 in 1882. The decrease in crime, however, was not so great as these figures indicate, for only

Bombay.

## CRIME.

21,901 cases were struck off the register as false compared with 25,000. Still there was a net decrease of 3,735 offences, notably in those against special laws and in theft. As regards special laws the new rules issued under the Forest Act have materially reduced offences, and there were fewer contraventions of the salt laws; the improved condition of the lowest classes is said to be the cause of the diminution of theft. Serious crime also declined during the year.

## POLICE.

There may be said to be two systems of police throughout India. The stipendiary police, a British institution, are organised as a separate department in every province; the men are disciplined and drilled with some regard to military considerations, and in order to secure harmonious relations with the civil administration the police superintendents are under the general control of the magistrate. In addition the indigenous system of village police or watchmen survives more or less in every part of the country. It is most perfect in the North-West Provinces where special attention has been paid to the efficiency of the chaukidars, who are paid out of a rate levied together with the Government land revenue. Elsewhere they are remunerated by a share in the crop, by fees, by a quit rent or by other analogous means. In Bengal and Bombay, measures are under consideration for improving their position. The following table will give the total strength of the regular police throughout India in 1883-84, together with their total cost.

	Strength of District, Town, or Municipal and Water Police, paid for, wholly or in part, from Imperial Revenues.		Strength of Cantonment, Town, or Municipal Water Police, paid for wholly from other than Imperial Revenues.		Total Police of all kinds (excluding Village Watchmen).	Total Cost.	Payable from Imperial or Provincial Revenue.	Payable from other Sources.
	Officers of all Grades.	Men.	Officers.	Men.				
Bengal	1882 3,732	21,324	-	-	25,056	£ 437,169	£ 437,169	-
	1883 3,718	21,416	-	-	25,134	446,368	445,368	-
Assam	1882 581	3,504	2	30	4,067	79,359	78,790	568
	1883 570	3,067	3	35	4,275	85,600	85,163	397
North-West Provinces and Oudh	1882 4,294	17,802	835	10,007	33,038	438,458	358,749	79,708
	1883 4,303	17,046	828	9,982	33,059	449,450	364,743	79,708
Punjab	1882 634	19,839	36	5,153	20,488	822,946	268,828	54,611
	1883 608	14,753	40	5,170	20,571	822,463	267,041	55,422
Central Provinces	1882 1,334	7,281	15	63	8,693	134,671	130,257	4,414
	1883 1,325	7,230	14	63	8,642	135,462	131,223	4,238
British Burma	1882 659	6,438	17	161	7,275	191,023	170,809	10,753
	1883 696	5,751	5	40	7,492	189,258	188,167	1,090
Ajmere	1882 98	500	-	-	604	8,525	7,245	1,280
	1883 No information.	-	-	-	-	-	-	-
Berar	1882 502	2,134	-	-	2,636	48,044	45,515	2,529
	1883 502	2,142	-	-	2,644	52,324	51,190	1,133
Bangalore	1882 69	237	-	-	306	6,186	4,100	2,086
	1883 69	254	-	-	323	6,150	5,469	681
Coorg	1882 13	93	-	-	106	11,973	11,973	-
	1883 29	161	-	-	190	23,081	22,081	-
Madras	1882 605	22,336	-	-	22,941	386,721	386,721	-
	1883 605	21,692	-	-	22,298	376,138	376,138	-
Bombay	1882 3,087	15,760	179	1,196	20,226	333,246	312,433	20,813
	1883 3,097	15,851	172	1,171	20,291	339,056	309,594	20,461
TOTAL	1882 15,585	112,225	1,084	16,580	145,436	2,378,148	2,201,437	170,705
	1883 15,502	111,864	1,062	16,461	144,919	2,226,508	2,226,508	163,131

## Bengal.

In Bengal the recommendations of the Chowkidari Commission were still under consideration. The only change made in the regular police was the general introduction of a new fifth grade class of sub-inspectors. The police were

were twice employed on quasi-military duty. A body from the Dcmka and Patna reserves were employed by the Commissioner of Chota Nagpore, and were very useful in suppressing the disturbances raised by the Korwas in the State Khorsawan. Another detachment was also sent from Calcutta to Hill Chittagong to ensure public tranquillity in view of rumoured raids. Although there was a slight increase in robberies in all divisions except Chota Nagpore during the year, this was not considered due to any relaxation in supervision over habitual criminals, but rather to the general distress among the lower classes. This view is borne out by the decrease in the proportion of persons convicted after a previous conviction. In Calcutta itself a growing want was met by the appointment of 21 additional native officers for regulating traffic on the strand.

In Assam, the regular police are divided into two bodies, the frontier and the ordinary civil police. The frontier police was re-organised during the year. In future, the force will have a more distinctly military character, and will have the whole of the frontier defences in its hands. It has been strengthened by 10 additional officers and 82 men. At the same time the civil police received an addition of nearly 350 men, and were charged with the guard of jails and treasuries. The village police in the Surma Valley were also re-organised. The whole country was divided into beats, and the chaukidars' wages were improved and regulated.

In the North West Provinces and Oudh the number of policemen to every 100 square miles is nearly double what it is in Bengal. This is due partly to the greater density of the population, partly to the frequency of crime, especially in Oudh. A season of general prosperity, however, somewhat lightened the work of the police in 1882-83, which was on the whole satisfactorily performed.

Special measures have also to be taken in these provinces for dealing with the criminal tribes, and with infanticide. The Criminal Tribes Act was enforced against four tribes during the year. Arrangements were made for settling the Sanaurias in Lalitpur on waste land grants, which promise well. Similar arrangements for other tribes are under contemplation.

The number of villages proclaimed for infanticide was reduced by 186, and now stands at 1,951, containing a population of 242,979. That infanticide is still the custom of certain clans and localities there can be no doubt. But it is clear that it is losing and has lost force. Rajput girls have especially benefited by the protective measures taken. The proportion of female to male Rajput birth rose from 47.81 to 48.60.

The difficulty of getting recruits for the Punjab police, which was observable during the Afghan War, has now disappeared; the working of the force was satisfactory during the year. As regards the criminal tribes, efforts are being made both to reduce the registers by eliminating persons from whom society has nothing to fear, and by providing those willing to betake themselves to regular occupations with grants of land. Success has attended this policy, and it is hoped that the day is not far distant when some of the tribes will lose their hereditary character for crime.

The police in the Central Provinces were favoured during the year in having a diminished tendency to crime to contend against. All their efforts, however, to bring the notorious dacoit, Tantia Bhil, to justice were unavailing as before, although special measures were concerted with the Indore Government. The scene of his dacoities was chiefly confined to Hoshangabad District.

The record of police administration in Burma still continues unsatisfactory, though it was more effectually dealt with, and though the per-centage of convictions in serious cases was higher, yet crime still increased. Dacoities and cattle-liftings were more numerous, and the use of deadly weapons by the criminals was more general. Much attention is being given to improving the efficiency of the force by providing adequate quarters for the men, and by awarding good-conduct stripes.

In the Hyderabad Assigned Districts the work that fell to the police was not heavy, and the efficiency of the force is on the whole favourably reported on. But the number of dacoities increased, especially in the Melghat hills. In Coorg the police, whose operations have not hitherto given very satisfactory results, was re-organised during the year.

The strength of the police in Madras was somewhat below what was sanctioned, and the difficulty of getting recruits still continues. Nearly one half of the force

POLICE

Assam.

N. W. Provinces and Oudh.

CRIMINAL TRIBES.

INFANTICIDE.

Punjab.

Central Provinces

British Burma.

Berar and Coorg.

Madras.

force

14 STATEMENT EXHIBITING THE MORAL AND MATERIAL

POLICE.

force are men of ten years' service. The only important departmental change was the all but entire severance of the police connection with the salt administration. Peace was well maintained throughout the province, although several disturbances at processions were anticipated. Some dacoities, however, of considerable magnitude were committed, but both the principal gangs engaged were ultimately hunted down in different districts. Special agency was employed with success for their detection, as the dispersal of the dacoits baffles the efforts of the taluk police. Attention was paid to the police reserves wherever they exist, and the men were carefully drilled. It is stated that they would make a very effective contingent if armed with the Snider carbine.

Bombay.

The total police force of the Bombay Presidency amounted to 18,104 men, of whom more than 6,000 are Mahomedans, and about 4,000 Marathas. Only about 30 Parsis and Jews have been enrolled. The number of offences reported to the police was over 75,000, a decrease as compared with last year, and the diminution in heinous crime was remarkable. The band of dacoits captained by the notorious Kathi Chenna was finally tracked and broken up this year. Fourteen out of the eighteen robbers were arrested, and the leader himself died of a wound received whilst resisting capture. The conduct of the police force was good; and the per-centage of illiterate men is being reduced.

PRISONS.

The total jail population of India for 1883 was 486,178 against 377,677 in 1882. But the average daily strength was brought down from 83,762 to 78,533. The total number of punishments, on the other hand, increased from 40,468 to 44,535; but there was a considerable diminution in the number of punishments that involved solitary confinement, reduced diet, or whipping. The total expenditure on the jails fell from 471,142 l. to 467,072 l. The average cost, however, of each prisoner rose from 5 l. 7 s. 1 d. to 5 l. 18 s. 8 d.

JAIL STATISTICS, according to Provinces, for the Calendar Year 1882.\*

	Bengal.	Assam.	North Western Provinces and Oudh.	Punjab.	Central Provinces.	British Burma.	Berar.	Coorg.	Madras.	Bombay.	TOTAL.
Daily average number of prisoners.	No. 13,712	No. 1,388	No. 21,873	No. 11,469	No. 3,742	No. 5,101	No. 1,034	No. 98	No. 7,831	No. 7,412	No. 73,660
Convicts under trial - - -	1,665	100	1,271	532	100	162	22	14	503	105	3,874
Civil - - - - -	249	22	219	121	36	61	3	5	181	242	1,241
TOTAL - - - - -	15,626	1,510	23,363	12,122	3,880	5,324	1,059	117	8,515	7,517	78,533
Death-rate per 100 of average strength :-											
Convicts - - - - -	5.3	4.3	2.0	3.0	7.0	2.9	9.3	3.1	3.1	3.5	3.3
Under trial - - - - -	3.2	6.0	2.3	2.1	2.9	1.9	11.3	1.2	1.2	2.9	2.4
Civil - - - - -	4	-	4.6	0.8	-	1.6	-	3.9	3.9	-	1.1
TOTAL Cost - - -	£. 96,102	£. 13,528	£. 91,754	£. 72,733	£. 20,719	£. 37,122	£. 6,323	£. 1,163	£. 70,320	£. 57,308	£. 467,072
Cost per head of average strength.	£. s. d. 6 8 -	£. s. d. 8 10 2	£. s. d. 4 1 8	£. s. d. 6 - 6	£. s. d. 5 6 9	£. s. d. 6 9 5	£. s. d. 4 19 -	£. s. d. 10 - 8	£. s. d. 8 5 1	£. s. d. 7 1 11	£. s. d. 5 18 8

\* Ajmere not included.

Bengal.

The health of the jail population in Bengal greatly improved; the death-rate per mille among all classes of convicts (excluding deaths from cholera) fell from 60 to 49. This is attributed to the new principles of jail administration now enforced by the Bengal Government, whereby the long-term prisoners are concentrated in the central jails. Indeed nearly 66 per cent. of the gross convict population are now confined in the central jails, whereas less than 48 per cent.

cent. were confined in them in 1882. Again, there was a satisfactory improvement in prison discipline, and the milder punishments, together with the prospects of remissions of sentence under the mark system seem amply sufficient. But the warder system is unfavourably reported on, and will probably have to be revised.

Prisons

Improvements in prison administration have been recently made in the North-West Provinces and Oudh as well as in Bengal. Good conduct privileges have been rendered uniform, while the prison rules generally have been made more liberal. The health of the convicts also was better.

N. W. Provinces and Oudh.

There was a slight increase in the number of convicts in the Punjab. Proposals for introducing the mark system are under consideration.

Punjab.

In Madras the diminution in the number of corporal punishments inflicted on prisoners has been rapid since attention was called to the subject. There were less than half the floggings last year which were inflicted in 1881. Efforts towards the education of prisoners have not met with much success, but a reformatory for juvenile offenders has been approved for Madras.

Madras.

The daily average number of prisoners in Bombay decreased at the rate of 1,500 a year. During the first two years after the famine, and since then it has decreased at the rate of about 1,000 per annum. In 1883 it was only 7,659. In Bombay, as elsewhere, the comments of Government upon the practice of inflicting corporal punishments have not been without effect. The number has been reduced in two years from 806 to 129, without any bad effects upon the discipline of the convicts.

Bombay.

Broadly speaking, there are two systems of civil justice administration in India, one obtaining in regulation, and the other in non-regulation provinces. In both the lower classes of judges are graduated according to the pecuniary amount of their jurisdiction. The first system is substantially the same in Bengal, the North-West Provinces, Madras, and Bombay. There are four high courts at Calcutta, Allahabad, Madras, and Bombay, with an ultimate appeal to the Judicial Committee of the Privy Council in England. In Bengal, to trace the system from the High courts downwards, the district judge hears appeals from the subordinate judge and munsif, except in cases exceeding 500 l. when the appeal lies direct to the High court, and he also exercises a general control over all the courts in his district. Below him comes the subordinate judge, whose jurisdiction is unlimited in extent, while the munsif, whose jurisdiction does not exceed 100 l., ranks lowest. In Madras the munsif's jurisdiction is 250 l., and in Bombay his place is taken by subordinate judges of the second class with a jurisdiction of 500 l., while there is also an intermediate grade of assistant judge. As regards the other provinces the High court is represented by a chief court with three judges for the Punjab. In the Central Provinces and Oudh a Judicial Commissioner is the highest authority, and in Assam and Burma the Chief Commissioner. Indian law is composed of the enactments of the Indian Legislative Council, of such statutes of the British Parliament as apply to India, and also of Hindu and Mahomedan laws affecting inheritance and domestic matters. To these must be added certain customary laws affecting particular castes and races. Comparative statistics of civil justice for the years 1882-83 are exhibited in the following statements:—

CIVIL JUSTICE.

## STATEMENT EXHIBITING THE MORAL AND MATERIAL

## STATISTICS of CIVIL and REVENUE COURTS of ORIGINAL JURISDICTION for the Calendar Years 1882-83.\*

	Number of Suits.	Number of Suits disposed of, excluding Transfers.						TOTAL Value of Suits.
		Without Trial.	Without Contest.	With Contest.		Referred to Arbitration.	Pending at close of Year.	
				Judgment for Defendant.	Judgment for Defendant.			
Bengal - - - {1882	524,065	64,645	287,749	80,779	26,232	2,220	62,440	6,149,795
- - - {1883	460,351	66,460	283,387	80,978	25,560	2,256	68,836	5,301,720
Assam - - - {1882	28,277	4,261	14,517	4,142	2,176	151	3,080	216,361
- - - {1883	29,540	4,813	14,500	4,530	2,112	136	3,449	207,279
North-Western Provinces and Oudh - {1882	274,020	38,242	123,178	60,890	23,378	2,333	21,999	3,507,216
- - - {1883	273,300	39,589	124,341	60,314	25,842	2,374	20,930	7,091,339
Punjab - - - {1882	200,023	51,858	132,381	60,120	25,739	3,605	16,320	1,659,846
- - - {1883	290,911	53,101	130,909	61,350	25,555	3,657	16,350	1,640,492
Central Provinces - {1882	106,180	20,003	52,462	20,497	7,547	285	5,678	624,576
- - - {1883	103,452	19,912	49,073	20,010	7,959	166	7,094	637,291
British Burma - - {1882	33,426	7,390	12,623	8,122	4,187	143	965	420,698
- - - {1883	33,952	8,183	11,935	8,544	4,044	100	1,146	352,270
Berar - - - {1882	29,300	1,737	17,232	6,514	1,526	61	2,230	307,268
- - - {1883	25,811	1,761	14,749	5,130	1,433	42	2,696	343,104
Bangalore - - - {1882	1,392	371	635	166	97	2	121	10,959
- - - {1883	1,603	314	633	214	52	3	167	38,608
Coorg - - - {1882	3,214	446	1,945	559	169	2	93	30,955
- - - {1883	3,261	432	2,110	510	128	1	80	40,202
Madras - - - {1882	261,378	31,902	135,636	42,463	15,054	606	35,717	2,553,474
- - - {1883	271,093	34,334	140,816	42,886	14,022	540	37,895	2,759,910
Bombay - - - {1882	173,860	15,285	93,777	28,675	6,740	1,181	23,202	2,140,316
- - - {1883	168,018	15,090	87,760	28,023	7,090	1,043	23,012	2,100,267
GRAND TOTAL - {1882	1,725,427	230,136	674,135	312,927	114,845	10,589	176,795	17,637,302
- - - {1883	1,661,415	243,989	660,433	312,489	113,797	10,320	187,655	22,562,487

\* Excluding Ajmere, information for 1883 not having been received.

## STATISTICS of CIVIL and REVENUE APPELLATE COURTS, for the Calendar Years 1882-83.\*

	Number of Appeals.	Rejected, Withdrawn, Dismissed for Default.	Confirmed.	Modified.	Reversed.	Remanded.	Pending at close of Year.
Bengal - - - {1882	43,061	2,583	15,456	2,966	4,601	1,528	15,032
- - - {1883	38,409	1,633	12,713	2,083	4,223	1,184	16,508
Assam - - - {1882	1,080	00	835	133	188	65	405
- - - {1883	1,506	38	653	201	181	53	378
North-Western Provinces and Oudh - {1882	27,747	1,109	12,789	2,250	3,945	1,625	6,129
- - - {1883	29,291	1,201	13,482	2,208	3,091	1,471	6,988
Punjab - - - {1882	26,577	5,492	8,511	1,233	3,649	2,572	5,120
- - - {1883	28,887	5,718	9,418	1,500	3,893	2,919	5,404
Central Provinces - {1882	5,674	918	2,221	425	873	477	260
- - - {1883	6,134	1,134	2,306	517	916	397	254
British Burma - - {1882	1,816	70	984	136	402	43	181
- - - {1883	1,805	58	1,003	177	415	42	111
Berar - - - {1882	932	312	303	73	113	52	79
- - - {1883	901	253	298	72	141	94	133
Bangalore - - - {1882	24	-	14	-	5	2	3
- - - {1883	19	-	9	-	2	5	3
Coorg - - - {1882	221	7	88	47	23	40	10
- - - {1883	179	7	78	36	28	21	9
Madras - - - {1882	12,251	557	4,820	1,020	1,564	472	3,749
- - - {1883	12,476	616	5,136	1,121	1,538	689	3,375
Bombay - - - {1882	8,002	616	2,153	451	620	205	4,047
- - - {1883	9,104	702	2,495	604	777	249	4,277
GRAND TOTAL - {1882	128,081	11,729	48,183	8,704	15,983	6,981	35,411
- - - {1883	119,800	11,963	47,712	8,549	16,110	7,114	37,950

\* Excluding Ajmere, information for 1883 not having been received.



The scheme for training junior officers of the Covenanted Civil Service who elect the judicial branch of the service in judicial work, by vesting them with the powers of a civil court, has, after three years' trial, been pronounced a failure by the High Court. Its abandonment has therefore been recommended, but the subject still remains under the consideration of Government. This was the first year in which the Presidency Small Cause Court Act (Act XV. of 1882) was in force. There was a decrease of 8,000 suits in the Calcutta Small Cause Court, as compared with the last year under the old procedure. The decrease appears to have been important even when nominal reductions caused by the change in the law are taken into consideration. Nevertheless, arrears continued to accumulate, and the average duration of the suits increased. The working of the Act for another year ought to show wherein it is defective. There was less business than in the previous year before the High Court.

CIVIL JUSTICE.  
Bengal.

Litigation in Assam grows steadily since 1881, the numbers of civil suits has increased by 14 per cent., and in 1883 the cases rose from 24,873 to 25,675. Taking the province as a whole the per-centage of suits decided in favour of plaintiffs, and therefore presumably true, is becoming more satisfactory. This year it was 62 per cent., against 56 in 1882. But only 47 per cent. of the decisions of the lower courts were upheld, without modification upon appeal.

Assam.

The number of suits instituted in the courts of the North-West Provinces and Oudh was much the same as before. But there was a striking rise in their value, for which no explanation is submitted. In the North-West Provinces the value of the suits more than doubled; in Oudh it was half as much again, and in the latter province there seems to be a disproportionate amount of petty litigation. A satisfactory feature of the year is a decrease in the business of the Oudh Rent Court, which affected nine out of the twelve districts. It was most marked in cases for ejectment of tenants. There seems to have been a real and considerable reduction in the number of ejectment notices issued, which is held to have been not unconnected with the recent inquiries into the relation of landlord and tenant. At the same time a ruling of the Judicial Commissioner, that the existence of unexhausted improvements should not be set up as a bar to ejectment, had a good deal to do with the decrease. In consequence of this ruling, tenants, instead of contesting notices of ejectment in the first instance, were obliged to file applications to recover possession.

N. W. Provinces  
and Oudh.

It may be as well to include in this year a notice of the changes in the Civil Judicial Agency and the law of appeal effected by the re-organization scheme, although it more properly belongs to 1884. The general scope of the scheme has been to separate judicial and executive functions. In future each district not under settlement will, as far as possible, have a Revenue officer, a Judicial officer, and a Treasury officer, though the functions of the two last must in some cases be combined. The place of the Judicial Assistant is taken by the District Judges, but where these are not appointed, extra Judicial Assistants are invested with appellate powers, and take up the civil appellate work. Commissioners have generally been relieved of all judicial functions other than those connected with the revenue jurisdiction, and seven divisional benches have been established with extensive powers of final decision. The number of civil suits instituted in 1883 in the Punjab reached the highest figure yet recorded, 239,814. But suits for money or moveable property, of a nature cognizable by a court of small causes, contributed over 81 per cent. of the entire civil litigation.

Punjab.

The continuance of low prices in the Central Provinces has largely reduced civil litigation. The class of small debtors are now enabled to settle their accounts without being harassed by the action of the courts. The number of applications for execution decreased, and the number of persons imprisoned for debt was less. Nearly half of the total number of suits were disposed of by Naib Tahsildars, and the issues which come before them are generally extremely simple.

Central Provinces.

The constitution of a Chief Court in British Burma is still under consideration. But some minor changes were effected during the year. District Judges were relieved by the transfer of appellate work to Assistant Commissioners. The number and character of the suits instituted were much the same as before. One fourth were decided by courts of small causes, and in four-fifths the value of the subject-matter was not more than 10 l.

British Burma.

A bad season and the temporary closing of several civil courts kept down litigation in the Hyderabad Assigned Districts. Only 23,147 suits were instituted, as against 27,032 in the preceding year. Complaints are made that the union of the judicial and executive branches puts obstacles in the way of litigation.

Berar.

18 STATEMENT EXHIBITING THE MORAL AND MATERIAL

CIVIL JUSTICE.

Coorg.

In Coorg the number of civil courts was reduced from 17 to 16, but the work in the lower courts continues to increase. They do not, however, seem sufficiently educated for the application of much of the law which has recently been extended to Coorg. The establishment of two Munsif's Courts with well-qualified men is intended to remedy this defect.

Mdras.

The Act by which the pecuniary jurisdiction of Village Munsif's Courts is raised from 10 rupees to 20 rupees only came in force in December, and therefore does not affect the returns for 1883. The average value of the suits that actually came before these courts was only 6 rupees, and their number amounted to 48,967, or nearly 24 per cent. of the total litigation of the year. In the Presidency Small Cause Court the number of suits increased, but the higher pecuniary jurisdiction conferred in 1882 only added 92 cases. The figures were 25,079, against 21,287 in 1882. In consequence chiefly of the extended jurisdiction of the Small Cause Court the suits instituted on the original side of the High Court declined from an average of 493 in the preceding five years to 398. On the Appellate side the work was very heavy. The appeals were 1,178, against an average of 871 for the five years preceding. Final orders on the re-organisation of courts and the grading of the judicial staff were passed by Government.

Bombay.

A marked decline in civil litigation has been recorded in Bombay for the last two years. The total number of suits of all kinds has fallen from 150,810 to 139,724. Sind, however, is an exception to this general decrease. There the opening of the Sind Railway, and the larger number of commercial transactions, has brought more work to the civil courts. In Ratnagiri, gain, an increase occurred in the number of suits brought for the recovery of arrears of rent. This district suffered considerably both from locusts and rinderpest in the portions of the two revenue years which are covered by the judicial year. Suits for the recovery of rent throughout the whole Presidency declined from 115,369 to 108,955. The working of the Deccan Agriculturists Relief Act will be reserved for consideration under the head of Registration.

III.

REGISTRATION.

THE first general Act providing for the registration of assurances in India was passed in 1864. It was codified and amended by Act III. of 1877, which is now the existing law, and applies to the whole of British India. Registrations are divided into two classes, compulsory and optional. The first consists of (1) deeds of gift and other non-testamentary documents (including receipts) affecting immoveable property of the value of 100 rupees or upwards; (2) leases of immoveable property for any term exceeding one year. Optional registrations consist of (1) deeds of gift of immoveable property and other non-testamentary documents (including receipts) affecting immoveable property of the value of less than 100 rupees; (2) leases of immoveable property for a term of less than one year; (3) documents affecting moveable property; (4) wills; (5) all other documents of which registration is not compulsory. In each Province registration forms a separate department under the supervision of an Inspector General. The mode of payment is by *ad valorem* fees and copying fees, and the receipts form part of the provincial revenues. In four districts of Bombay, Ahmadnagar, Poona, Satara, Sholapur, a special system of registration was introduced by the Deccan Agriculturists Relief Bill of 1879, under which all documents executed by an agriculturist relating to money, mortgages, sales, and leases have to be signed and written before village registrars appointed for that purpose.

STATISTICS OF REGISTRATION for the Calendar Years 1882 and 1883.

	Number of Registration Offices.	Immoveable Property, Compulsory Registration.	Immoveable Property, Optional Registration.	Moveable Property, all Registration.	TOTAL.	Value of Immoveable Property Transferred.	Value of Moveable Property Transferred.	TOTAL Value.	Net Receipts.
	No.	No.	No.	No.	No.	£.	£.	£.	£.
Bengal - - - - -	{ 1882 285	307,600	146,521	101,011	555,141	10,863,597	1,877,761	12,741,358	45,202
	{ 1883 285	331,706	163,064	105,332	601,002	11,015,532	1,779,453	12,794,985	46,905
Assam - - - - -	{ 1882 22	7,769	3,783	2,764	14,316	290,175	116,641	406,816	950
	{ 1883 22	8,593	4,283	2,869	15,738	326,152	97,502	423,654	1,141
North-Western Provinces - - - - -	{ 1882 346	93,651	45,674	44,132	183,457	6,363,484	880,601	7,253,085	15,778
	{ 1883 346	90,792	42,902	42,385	176,259	6,346,993	2,079,680	8,426,779	14,657
Punjab - - - - -	{ 1882 201	41,507	11,290	10,768	63,565	2,193,459	211,600	2,405,128	7,840
	{ 1883 200	43,604	12,347	10,926	66,877	2,348,937	244,580	2,593,517	8,508
Central Provinces - - - - -	{ 1882 74	13,693	4,788	3,823	63,565	2,193,459	211,600	2,405,128	3,339
	{ 1883 74	14,232	4,176	3,972	66,877	2,348,937	244,580	2,593,517	3,955
British Burma - - - - -	{ 1882 74	0,237	471	1,317	8,025	640,739	234,373	875,112	782
	{ 1883 79	6,582	492	1,102	8,176	1,025,717	228,452	1,254,169	940
Bezar - - - - -	{ 1882 55	15,100	4,055	2,103	22,218	472,625	37,707	510,332	2,054
	{ 1883 57	15,082	5,158	2,127	23,367	467,993	30,825	518,818	2,059
Coorg - - - - -	{ 1882 10	474	38	63	576	66,729	30,761	97,490	156
	{ 1883 10	478	41	91	610	70,859	50,581	121,440	247
Madras - - - - -	{ 1882 307	215,053	188,408	31,020	435,381	11,296,827	861,464	12,158,291	2,436
	{ 1883 312	232,519	212,941	34,827	478,431	9,966,629	1,912,680	11,879,318	3,101
Bombay - - - - -	{ 1882 248	62,022	17,043	4,636	84,908	4,784,281	223,040	5,007,321	3,367
	{ 1883 251	72,095	20,303	4,944	97,342	5,122,319	258,140	5,380,459	5,079
GRAND TOTAL - - - - -	{ 1882 1,622	764,419	423,503	201,963	1,389,885	37,728,406	4,540,671	42,269,077	82,612
	{ 1883 1,636	817,863	465,769	208,566	1,492,138	37,460,797	6,769,100	44,229,897	86,582

REGISTRATION.  
Bengal.

Both as regards the number and value of registrations effected Bengal surpasses any other Province, while the net revenue it returns from this source is greater than that of all the other Provinces put together. The work of registration showed renewed activity in 1883-4. This is partly attributed to a better appreciation of the benefits of the scheme. But it is also traceable to special causes. Chittagong and Noakholly together account for 63 per cent. in the increased registrations of perpetual leases; and in these two districts the high price of food-grains led to a large extension of cultivation. Again, in Tipperah, Backergunge, and Jessore resettlement occasioned an increase in term leases. As far as registration throws light upon the transfer of land, it would appear that out of 48,602 purchasers of ryoti holdings with occupancy rights 31,911 were themselves ryots. But the classification of purchasers is not always exact.

N. W. Provinces  
and Oudh.

In the North-West Provinces and Oudh the number of registrations declined. This is said to have been principally occasioned by a prosperous season. But there is no doubt that the backwardness of the Department is to some extent to blame. Proposals for extending and popularising its operations are now under consideration.

Punjab.

The Punjab returns, on the other hand, show an increase in every class of registrations except wills. This was especially noticeable under the head of miscellaneous optional documents.

Madras.

Madras comes next to Bengal in the number and value of registrations, but the expenditure is very high and the net revenue comparatively small. The receipts, however, showed an increase of more than 8 per cent. this year, and five new registration offices were opened.

Bombay.

In Bombay the work of registration made a considerable stride during the year; the total number of registrations rising from 84,903 to 97,342, apart from those under the Deccan Agriculturists Relief Act. An examination of the returns for the four districts under this Act indicate a satisfactory improvement in the condition of the cultivators. The number of suits filed by them for redemption of mortgaged property increased from 2,438 to 3,529, whereas the suits brought against them for possession, foreclosure, or sale of mortgaged property decreased from 950 to 906.

Registration of  
Joint Stock  
Companies, &c.

In addition to the Indian Registration Act, the registration of joint stock companies is also regulated by an Act passed in 1882. The total number of companies registered from the beginning now amounts to 1,368. Of these 649 are still working. Twenty-four new companies, all with limited liabilities, were registered in Bengal during 1883. Their nominal aggregate capital was 779,900 l.

IV.

FINANCE.

THE steady increase in the receipts for 1883-84 indicates a satisfactory progress in material prosperity. The financial position was not affected by military operations, and for six consecutive years now the harvests have been good. The total receipts, as compared with those of 1882-83, rose 1,602,190 l. The collection from Land Revenue, as also the net revenue from Productive Public Works (excluding exchange), were the largest on record. On the other hand, the total expenditure was apparently very high, being nearly a million and a half in excess of the highest hitherto shown in the Accounts, apart from the cost of military operations. But an exceptional payment for non-effective charges must be taken into consideration, and the charges in connection with the Productive Public Works must necessarily swell the annual aggregate expenditure as fresh capital is borrowed and new works are opened. As compared with the Budget Estimates the revenue actually received was more by 2,705,421 l., while the expenditure was also greater by 1,774,925 l. This increase, however, was largely due to the exceptional item alluded to above, the payment of 1,000,000 l. to the War Office on account of arrears of non-effective charges connected with that portion of the British Army serving in India. On the whole, therefore, the Accounts show a better result than the Budget by 930,496 l.

REVENUE.

(The rupee is taken at the conventional rate of 2 s.)

	1882-83.	1883-84.	Increase.	Decrease.
	£.	£.	£.	£.
<b>PRINCIPAL HEADS OF REVENUE:</b>				
Land Revenue	21,876,047	22,301,899	425,852	—
Opium	9,499,504	9,551,501	52,007	—
Salt	6,177,781	6,145,413	—	32,368
Stamps	3,379,081	3,513,201	134,120	—
Excise	3,609,561	3,836,961	227,400	—
Provincial Rates	2,683,015	2,878,781	195,766	—
Customs	1,296,119	1,187,266	—	108,853
Assessed Taxes	517,811	526,087	8,276	—
Forest	938,228	1,052,190	113,962	—
Registration	285,820	258,955	—	26,874
Tributes from Native States	680,945	720,487	39,542	—
<b>TOTAL</b>	<b>50,953,011</b>	<b>52,037,691</b>	<b>1,084,680</b>	
Post Office, Telegraph, and Mint	1,708,904	1,672,761	—	36,143
Civil Departments	1,437,246	1,427,729	—	9,517
Miscellaneous	1,378,515	1,512,604	134,089	—
Productive Public Works	12,224,100	13,240,507	1,016,407	—
Non-Productive Public Works	830,582	870,897	40,315	—
Military Departments	1,692,183	956,232	—	635,951
<b>TOTAL REVENUE</b>	<b>70,125,231</b>	<b>71,727,421</b>	<b>1,602,190</b>	

The next table exhibits the expenditure of the two last years under the principal heads:—

## STATEMENT EXHIBITING THE MORAL AND MATERIAL

## EXPENDITURE.

	1882-83.				1883-84.				Increase.	Decrease.
	India.	England.		TOTAL.	India.	England.		TOTAL.		
		Stores for India.	Other Charges.			Stores for India.	Other Charges.			
<b>INTEREST:</b>	£.	£.	£.	£.	£.	£.	£.	£.	£.	
On Ordinary Debt (excluding that charged to Productive Public Works) - - - -	1,516,322	-	2,481,147	3,997,469	1,377,940	-	2,442,210	3,820,150	-	177,319
On other Obligations - - - -	409,832	-	891	470,663	452,112	-	3,123	457,235	-	13,426
<b>TOTAL - - - - £.</b>	<b>1,926,154</b>	<b>-</b>	<b>2,481,978</b>	<b>4,468,132</b>	<b>1,830,052</b>	<b>-</b>	<b>2,447,333</b>	<b>4,277,385</b>	<b>-</b>	<b>190,747</b>
<b>DIRECT DEMANDS ON THE REVENUES:</b>										
Refunds and Drawbacks - - - -	316,606	-	-	316,606	388,970	-	-	388,970	71,664	-
Assignments and Compensations - - - -	1,105,087	-	-	1,105,087	1,236,840	-	-	1,236,840	43,753	-
Charges for Collection (including cost of production of Opium and Salt) - - - -	6,013,614	46,542	8,722	6,968,275	6,916,100	33,443	5,86	6,955,503	-	109,772
<b>TOTAL - - - - £.</b>	<b>8,424,704</b>	<b>46,542</b>	<b>8,722</b>	<b>8,476,968</b>	<b>8,443,909</b>	<b>33,443</b>	<b>5,861</b>	<b>8,482,613</b>	<b>5,645</b>	<b>-</b>
Post Office, Telegraph, and Mint - - - -	1,654,049	109,424	144,908	1,908,381	1,716,800	146,333	120,650	1,983,783	75,402	-
Civil Departments - - - -	10,512,286	111,101	321,534	10,944,921	10,758,659	106,169	385,210	11,250,038	302,007	-
Miscellaneous Civil Charges - - - -	2,066,893	153,754	1,689,760	3,910,407	2,936,218	104,827	1,741,484	3,882,529	-	7,678
Famine Relief and Insurance - - - -	1,500,000	-	-	1,500,000	1,499,985	26	89	1,500,000	-	-
Productive Public Works (Revenue Account) - - - -	6,841,977	-	4,809,770	11,741,747	7,233,759	-	4,709,995	12,032,754	291,007	-
Non-Productive Public Works - - - -	6,988,531	82,555	94,561	7,165,647	6,458,892	7,983	113,846	6,580,721	-	685,626
Army (including Military Operations in Egypt and Afghanistan) - - - -	13,433,231	882,510	3,424,509	17,740,250	11,952,166	534,983	4,483,601	16,970,750	-	464,500
Exchange on Transactions with London - - - -	3,081,433	-	-	3,081,433	3,638,750	-	-	3,638,750	757,317	-
<b>TOTAL Expenditure, Imperial and Provincial - - - - £.</b>	<b>66,489,258</b>	<b>1,085,936</b>	<b>13,045,980</b>	<b>80,621,274</b>	<b>55,768,562</b>	<b>933,704</b>	<b>14,102,276</b>	<b>70,804,604</b>	<b>183,380</b>	<b>-</b>
Provincial Adjustments - - - -	-1,202,626	-	-	-1,202,626	-464,679	-	-	-464,679	737,947	-
<b>TOTAL Expenditure chargeable against Revenue - - - - £.</b>	<b>65,286,632</b>	<b>1,085,936</b>	<b>13,045,980</b>	<b>79,418,648</b>	<b>55,303,883</b>	<b>933,704</b>	<b>14,102,276</b>	<b>70,339,925</b>	<b>921,327</b>	<b>-</b>

The cash balances at the Treasuries and Agencies of the Indian Government amounted at the close of the year to 17,313,147 £., of which 4,143,221 £. were in England, as against 18,251,424 £. in the previous year. The various items given in these statements are treated separately in the subsequent chapters.

PROVINCIAL  
FINANCE.

This was the second year of the working of the new contracts under the revised scheme of provincial finance introduced in 1882. The total provincial and local revenue administered by the several Governments during the year came to 19,283,341 £., and the total expenditure was 19,748,020 £., of which 464,679 £. was met from the accumulated balances of former years.

V.

SURVEYS AND LAND ADMINISTRATION.

WHEN the termination of the Eastern Frontier Series in 1881-82 brought the principal triangulation of the Indian Trigonometrical Survey to a conclusion it was resolved to supplement this in places by secondary operations.

THE SURVEY OF INDIA.  
Trigonometrical.

Two proposals were accordingly sanctioned. One aimed at connecting India with the Straits of Malacca; the object of the other was to carry a secondary series along the coast of Orissa, determining the position of False Point Lighthouse and fixing beacons for the use of the Marine Survey. Owing to lack of funds, &c., the first project still remains in abeyance. Good progress has, however, been made with the latter, but it will take some seasons yet before all the outlying foreshores have been accurately marked.

Topographical work has been carried on by 11 parties, the Kohat party being merged in the Biluchistan Survey. The entire party was then divided into two detachments for the year, one of which, under the protection of a strong military escort, executed a special survey round the base and up to the summit of the Takht-i-Suliman range. The second accompanied Sir Robert Sandeman's friendly mission into Biluchistan. The Assam party started to explore the unknown country lying on the extreme east of that province. They were suddenly diverted, however, by the expedition which was sent to punish the Akkas, and joining the troops they acquired much knowledge of the mountain tracts inhabited by the Akkas and Daflas. In the Andamans a party connected the adjacent islands by triangulation, and delineated the volcanic peaks of Barren Island and Narcondum.

Topographical.

Four Mouzawar or village surveys were at work in the Punjab, Bengal, Bombay, and Burmah. The elaborate two-inch village survey of the Hissar district was completed. Along the Ganges a riverain survey was carried on conterminous with the topographical operations in Etah and Aligarh, while a detachment also broke ground along the Gogra. In Thana the forest survey by the Konkan party advances towards completion, and in Burmah progress has been made with the difficult forest survey of the Yoma range.

Village Surveys.

Nine cadastral parties took the field. The important Benares survey, including the domains of the Maharajah was brought to a termination, and the special system developed there was ordered to be pursued for the Gorakpur survey. Modifications prescribed by local conditions have, however, been found necessary. The Benares system has also been extended to the cultivated areas in the Dehra Dun district. In Raipur a detachment from the Aligarh and Etah party has begun a kind of experimental cadastral survey; with the view of testing the accuracy of the settlement maps. In Assam a new cadastral survey has been inaugurated in Kamrup district, while in British Burma three parties have been engaged.

Cadastral Surveys.

Two astronomical parties were working in concert at determining the difference of longitude between stations a few hundred miles apart, and dealt with the series of arcs on the east of Calcutta. The longitude of Moulmein was accurately determined with reference to that of Greenwich, and the probable final value of the longitude of Madras Observatory was obtained. The tidal and levelling party ran two lines of levels during the year, while automatic observations were continued at 19 stations in the Indian seas between Aden and Burma. A new system of training young officers of the Civil Service in cadastral field measurement by attaching them to regular field parties was also instituted. In the North-West Provinces seven civilians went through this course. Four native soldier students from the Roorkee College were also attached to a topographical party.

Special operations.

THE SURVEY OF  
INDIA.  
Geographical  
Surveys.

A complete account of the extraordinary adventures and discoveries of the native explorer known as "A. K.," during his four years' wanderings in Thibet, was published this season, and the Government conferred on him the title of Rai Bahadur, with a jagheer of rent-free land. Similarly a complete report and map of Mr. McNair's exploration, with a native assistant, of the Hindoo Khoosh Kashmere and Gilgit country, was issued, and also that of the information collected by a native surveyor in Dardistan. A detachment of the Survey of India was also told off to accompany the Afghan Boundary Commission, and another from which valuable maps have already been received, joined Sir Oriel Tanner's expedition into the Zhob Valley district.

Headquarters and  
Offices of Department.

A great change took place in the personnel of the survey of India during the year. Lieutenant-General Walker retired from the post of Surveyor General, having been connected with the Department for 31 years. He was succeeded by Colonel G. C. De Pré. Mr. Hennessy, who had been in the service for more than 40 years, also retired from the post of Deputy Surveyor-General of the Trigonometrical Branch. The publishing and map printing offices at Calcutta and Dehra Dun undertook an unusual amount of work for the Foreign Department during the year. They were also much engaged in supplying maps and instruments to the Calcutta Exhibition. A considerable saving is expected as a result of the new grant which has been made to the Mathematical Instrument Office. It will be able to do much more in the repairing of damaged instruments which otherwise had to be replaced from England. The total cost of the Survey of India during 1883-84 was 136,105 l.

Bombay Survey  
and Settlement.

Thirty-three parties of the Bombay revenue Survey were in the field, being two more than in the previous year. Of these two were at work in Gujarat, ten in Poona and Nasik, nine in Ratnagiri, and 12 in the Southern Maratha country. The Gujarat parties were chiefly employed in classification; in Poona and Nasik revision survey operations were carried out over 505,750 acres; in Ratnagiri 282,188 acres were surveyed and 144,126 classified; in the Southern Maratha country 773,421 acres were surveyed, 837,392 classified, and a town survey of Kolhapur undertaken at the request of that State. In all, 1,608,047 acres were surveyed and measured and 1,654,843 classified. The Gujarat Survey is coming to a close; in Ratnagiri the work is chiefly original, and in the Southern Maratha country revision operations have resulted in a large increase of area. The settlement operations dealt with 441 villages, assessed at 48,706 l., or an increase of 19.2 per cent. on average past collections. The corresponding figures for 1882-83 were 231 villages and 29,118 l., or an increase of 10.9 per cent.

Madras Survey  
and Settlement.

The operations of the Madras Survey, which was engaged in no less than 16 districts, were unusually various. In addition to the ordinary work surveys were undertaken on behalf of the Irrigation Department, the Madras Railway and the Court of Wards. The area surveyed on the 16th inch scale amounted to 1,586 square miles; the topographical outturn was 3,027 square miles. According to the latest information the total area of the Presidency is now returned at 141,028 square miles instead of 140,975 as before. Cadastral surveys have been made of 52,315 square miles of this total, and topographical of 48,316. There are left 9,645 square miles of cadastral and 22,407 square miles of topographical survey to be completed. The expenditure was 77,183 l. against 60,360 l. in the previous year. The settlement department was occupied in four districts during the year besides completing operations in Ganjam, which brings up the number of districts in which revised rates of assessment have been introduced to 11. The total cost of the Department during the 25 years of its existence has been 752,950 l., and the net increase of land revenue in settled districts for the year under review was 163,935 l. This result represents a return of 21½ per cent. on the outlay.

LAND REVENUE.

The collection of Land Revenue for 1883-84 is the largest on record, being indeed to some extent increased at the expense of the ensuing year, which will receive less arrears than are usually anticipated. In British Burma, Bombay, and Madras a favourable season enabled the cultivators to pay up in February and March dues which on ordinary occasions would have been postponed to April and May.

The



The Revenue-roll of Bengal showed an increase of 1,143 estates, chiefly under the heads of Permanently Settled and Government Estates. The increase was principally due to partitions, escheats, and dearah settlements.

		Number of Estates.	Current Demand.	Arrear Demand.	TOTAL.	Collection.	Remission.	Balance.
Permanently Settled Estates	1882-83	142,949	3,230,638	45,671	3,276,209	3,234,845	171	41,692
	1883-84	149,842	3,220,984	41,380	3,271,365	3,212,065	305	58,304
Temporarily Settled Estates	1882-83	7,082	271,635	91,682	366,047	209,001	3,550	63,534
	1883-84	7,785	270,089	66,079	337,062	283,905	2,551	50,515
Government Estates	1882-83	2,706	199,695	81,679	281,284	193,193	5,511	82,040
	1883-84	2,839	208,662	86,397	294,990	186,928	5,420	102,044
Ryotwar Tracts	1882-83	26	84,584	16,252	100,836	90,357	2,338	8,140
	1883-84	26	85,252	9,338	94,500	75,867	1,081	16,741
TOTAL	1882-83	163,343	3,786,192	238,184	4,024,376	3,810,706	11,572	196,007
	1883-84	154,486	3,703,988	204,030	3,908,018	3,750,454	10,358	228,200

It will be seen that for Bengal, the financial results of this year compare unfavourably with those of the last, for though the current demand was larger the total demand was less, and outstanding balances were 5.04 per cent. against 4.87 per cent. on the total demand. In 1882-83, however, the season was unusually favourable; in the year under review cultivators had to contend in several districts with short crops and scanty rain. The condition of affairs was worst on that class of Government Estates which are leased out to farmers and on the directly managed Government Estates. Very large and growing accumulations of arrears exist, which, if partly due to crop failures and faults of administration, are mainly owing to the rentals being pitched far beyond the tenant's capacity.

On directly-managed estates the realization of revenue only amounted to 66 per cent. of the total demand.

As compared with 1882-83 notices by landlords for enhancement fell from 4,794 to 3,777, and notices by tenants for relinquishment from 23,654 to 17,671. It is difficult to estimate the significance of this decline, since the fluctuations from year to year in the numbers are not clearly understood. A diminution of enhancement notices is often accompanied by a resort to illegal enhancements and exactions on the part of landlords. This practice is said to have probably prevailed largely during the year. The landlords were anxious to screw up rents as high as possible in view of the possible limitations which the Tenancy Bill might provide. On the other hand, where the ryots were strong they showed a tendency to resist just demands. Considerable tension existed in several districts between the two classes, owing in great measure to the uncertainty fostered by impending legislation.

The total number of waste-land leases issued by the Bengal Government is now 2,363, bringing in an annual present rental of 4,156 l. The area to be opened for tea in the trans-Teesta District, Darjeeling, has been considerably extended, and the tea-rules for Julpigoree are being recast.

There was a rise in the land-revenue demand of Assam. But of the total increase of 59,277 l., shown below, 50,000 l. were only nominal, and are accounted for by alteration of the dates of instalment in Sylhet.

The real increase was due to re-settlements in Cachar.

(£. 00 omitted.)

		Current Demand.	Arrear Demand.	TOTAL.	Collections.	Remission.	Balance.
1882-83	- - -	300,833	42,658	343,491	328,101	1,810	13,572
1883-84	- - -	360,110	6,650	374,137	350,397	3,720	20,000

## LAND REVENUE.

Thus 93·64 per cent. of the total demand was collected, and 5·36 per cent. were left outstanding. Two-thirds of the uncollected balance occurred in Cachar, where in addition to enhancements the people suffered severely from floods. Considerable progress was made in converting annual into decennial leases conveying permanent rights which, according to a judicial decision, the annual pattas are unable to do. The area covered by these agreements is between 500,000 and 600,000 acres, and they are necessitated by the migratory habits of the half-savage tribes in Goalpara, Kamrup and Darrang. The change in the prospect of the tea-trade led to a large increase in the number of applications for waste land; 258 decennial leases, affecting 32,258 acres, were issued as against 28, affecting 9,449 in the previous year.

N. W. Provinces  
and Oudh.

The figures given in the tables below for the North-West Provinces and Oudh have been included in the Decennial Progress Report from 1872-73 to 1882-83. The official year 1882-83 represents the cultivating year from 1st October 1882 to 30th September 1883. Later figures are not available.

—	Fixed Land Revenue Demand.	Collections.	Balances (excluding nominal Arrears).	Per-centage of Balances to Demand.
1881-82 - - - -	4,288,403	4,269,300	5,304	·12
1882-83 - - - -	4,282,146	4,262,132	8,590	·20

The decrease in the fixed land-revenue demand is due to the reduction of assessment concluded in Banda. Including rates, cesses and takavi repayments, &c., the total revenue demand arising out of land came to 5,372,301 l., of which 5,352,845 l. was collected. There was also a balance of 44,369 l. outstanding on account of former years, which was reduced by collections and remissions to 5,061 l. The steady decrease in coercive processes which has now been going on for some years, *pari passu*, with the decrease in uncollected, balances, was maintained this year. Notices of demand were 44,272 against 46,279 in 1881-82, and sales only 81 against 171. A curious feature of the year was a marked increase in the number of applications to the courts for partitions of estates, pointing to the gradual disintegration of the village communities.

## Oudh.

Collections were also easy in Oudh, where the total current demand showed an increase of 4,643 l. on the previous year.

—	Total Current Demand.	Collections.	Balance (excluding nominal Arrears).	Per-centage of Balances to Demands.
1881-82 - - - -	1,391,165	1,309,650	2,000	·20
1882-83 - - - -	1,396,290	1,386,573	7,640	·55

Together with fluctuating collections, sale of Government estates, and miscellaneous items, the total receipts came to 1,405,050 l. The year opened with an old outstanding balance of 14,802 l. This was reduced to 1,303 l. Coercive processes on the whole showed a sensible decline; there were no sales for arrears of revenue, and 23 estates against 26 in 1881-82 were temporarily attached. The number of defaulters, however, who were arrested increased by over 200. As regards the relations of landlords and tenants, both the number of ejectment notices and relinquishment notices greatly declined. This is mainly attributed to the influence of the rent-enquiry, which occupied the winter of 1882-83.

## The Punjab.

During the last three years there has been a progressive decrease in the collections on account of fixed land revenue in the Punjab. This is partly due to the substitution of fluctuating for fixed land revenue, and partly to the large suspensions necessary in certain districts. The year 1883-84 on the whole was favourable,

favourable, but did little for the recovery of the south-east of the province, which has now for some time been in distress. Outstanding balances in consequence increased by 60,000 *l.*, and now stand at more than 80,000 *l.* Things have, however, improved since the close of the year, and a good harvest is expected to reduce the arrears materially.

LAND REVENUE.

		Demand.	Collections.	Balances.
		£.	£.	£.
Fixed Land Revenue	1882-83	1,928,494	1,889,805	46,045
	1883-84	1,927,281	1,676,320	61,700
Fluctuating and Miscellaneous	1882-83	175,484	181,508	7,027
	1883-84	175,564	182,732	4,468
Total	1882-83	2,103,980	2,071,403	53,672
	1883-84	2,102,847	2,059,052	66,168

Agricultural or takavi advances play a great part in the Punjab. The amount granted during the year was 37,578 *l.*, and during the last four years the takavi expenditure has increased by more than 700 per cent. The great punctuality with which these loans are repaid is very satisfactory, but their management adds considerably to the burden of administration. Litigation between landlord and tenant showed a decrease during 1883-84, 618 suits for enhancement of rents of occupancy tenants were filed against 1,050, and only 24 decrees for ejectment of the same class of tenant were passed. Ejectment notices served upon non-occupancy tenants fell from 9,463 to 7,842, and the area from which ejectments were actually made was 57,146 acres against 76,044. No great variation is recorded as to the extent of land which changed hands, and three fourths of the land sold is said to have been secured by agriculturists. Three settlements were completed during the year, four were in progress, and one was begun, and preparations undertaken for beginning another. The net cost of the Ludhiana settlement has been 38,123 *l.* and the increase to the rent-roll is 16,588 *l.*

The whole land revenue of the Central Provinces, which showed an increase of 1,218 *l.*, was, practically speaking, collected again without the least difficulty. The total balances only amounted to 97 *l.*, of which 81 *l.* were in train of liquidation, and 15 *l.* were nominal.

Central Provinces.

CENTRAL PROVINCES.

		TOTAL Demand.	TOTAL Collections.
		£.	£.
1882-83	- - - - -	624,328	624,287
1883-84	- - - - -	625,542	625,436

Prices generally ruled low during the year, and the price of wheat, which is regulated by the demand of the London market, naturally fell steadily towards the close of the year. In spite of this the export of grain increased largely. There is some evidence to show that the development of communications is inducing the people to abandon their old habit of storing grain. A few local officers express anxiety on this head; but the diminution of local stocks should be more than counterbalanced by the new mobility of the grain-reserves throughout India. A good deal was done towards the formation of patwari circles, and the training of patwaris.

The cultivated area in Burma was extended by 176,797 acres during the year, and is now returned at 3,768,553 acres. The area of assessed fallow-land, which pays a lower rate, somewhat contracted, owing to enforcement of the

Burma.

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LAND REVENUE.

rule requiring cultivators to give notice of leaving holdings untilled. The current land revenue demand 692,946 *l.* increased by 25,406 *l.*, and was equivalent to an average rate of nearly 3 *s.* 6½ *d.* per acre on the total assessed area. No less than 38 per cent. of this is paddy-land, a per-centage which is continually rising, while the number of taungyas, or hill-gardens, remains stationary.

The difference between arrear and current demand, and the heavy outstanding balances, necessarily shown in comparative statements of land revenue in Burma, are misleading, the financial year terminating in March, and the agricultural in June. For instance the balance 112,159 *l.*, of March 1884, was reduced by remissions and further collections to 9,250 *l.* before July.

	Current Demand.	Arrear Demand.	TOTAL.	Remissions, 31st March.	Collections, 31st March.	Balance, 31st March.
	£.	£.	£.	£.	£.	£.
1882-83 - - - - -	666,844	282,938	959,782	9,381	629,237	305,920
1883-84 - - - - -	692,946	310,571	1,003,517	11,569	879,789	112,159

The land revenue in Burma amounts to from one-tenth to one-twelfth of the gross produce, and markets are generally available. Little difficulty is, therefore, experienced, as a rule, in getting in the revenue. This year, however, there was a kind of strike in Pegu, and 80 recusants were sent to jail in that one district against 4 in the rest of the province. In addition to land revenue proper, the land revenue administration in Burma collects a capitation tax, or a special land rate, in lieu of this, in the large towns, and the fishery revenue. The capitation tax brought in 308,891 *l.* this year against 303,648 *l.* in the previous year, and is now paid by 745,646 persons. The fishery revenue, 121,760 *l.* against 125,776 *l.*, again declined. But the decline was less marked than last year, and the fishery business was steadier.

PROVINCES UNDER THE GOVERNMENT OF INDIA.

Coorg.

According to the indigenous land system of Coorg, two classes of estates exist, assessed at traditional rates, while waste-lands belong wholly to the State. The current land revenue demand decreased from 33,569 *l.* to 34,453 *l.*, and collections were 14,472 *l.* against 15,778 *l.* But the large balances left are almost entirely nominal, as two instalments of land revenue fall due after the close of the financial year. A similar explanation must be given of the nominal arrears in Berar, where the dates of the instalments were altered in 1882-83. The total current demand of land revenue (including miscellaneous) increased from 638,716 *l.* to 639,546 *l.* Collections, as the alteration of dates have now been extended to nearly the whole province, were 550,134 *l.* against 610,234 *l.*, and the outstanding balance in March was 51,792 *l.* Except 67 *l.*, this has all been since recovered or remitted.

Berar.

Madras.

As in the North-West Provinces and Oudh, the Madras land revenue year taken here is that of 1882-83, extending from 1st July 1882 to 30th June 1883, which has been included in the recent Decennial Report. The statement below compares the current demand and collection of the two years on the different classes of estates:—

		Current Demand.	Collections.	Balances.
		£.	£.	£.
Permanently-settled Estates -	{ 1881-82	513,187	441,290	71,897
	{ 1882-83	508,087	442,530	66,407
Quit Rent on Inam Villages -	{ 1881-82	60,056	48,708	12,250
	{ 1882-83	67,842	59,456	7,886
Ryotwari Holdings - - -	{ 1881-82	3,475,301	3,113,178	362,114
	{ 1882-83	3,541,127	3,346,704	194,423
Miscellaneous - - - -	{ 1881-82	409,557	319,430	90,133
	{ 1882-83	402,412	334,782	67,630
TOTAL - - - - -	{ 1881-82	4,459,021	3,922,606	536,394
	{ 1882-83	4,519,818	4,183,472	336,346

Ninety-two per cent. of the current demand was, therefore, collected against 88 per cent. the previous year, and this is the highest percentage that has been reached since the famine. Moreover, the outstanding balances, both arrear and current, were largely reduced after the close of the year, and the amount carried over into 1883-84 was unusually small. The number of coercive processes employed for collection of the revenue, which increased enormously after the famine, now shows a tendency to decline. The figures are not very accurate, but it appears that whereas in 1875-76, 37,098 defaulters had their property sold, 126,704 suffered this fate in 1881-82, and 103,667 in 1882-83.

The year was a satisfactory one in Bombay. The revenue demand was larger than in 1882-83, and considerably in excess of the average of the previous 20 years, while collections were also greater and were attended with less difficulty. Part of this increase was due to an extension of the cultivated area bearing assessment in the Southern and Central Divisions, which overbalanced a small contraction which took place in the Northern Division. Part was also due to the operation of the revised assessments in Dharwar, and portions of the Belgaum, Ahmednagar, and other collectorates, which were introduced in 1882-83 and took effect for the first time in 1883-84. Less damage, too, was experienced from drought and locusts, and the total sum which it was found necessary to remit was 27,186 l. against 146,061 l. in the preceding year. Deducting alienations, and that part of the land revenue credited to the Public Works Department for irrigation, the net revenue recoverable for the year will be shown in the following table to have been 2,746,904 l., or 118,682 l. more than in 1882-83:—

YEAR.	Current Revenue.	Arrear Revenue.	TOTAL Demand.	TOTAL Collections.	TOTAL Balances.
	£.	£.	£.	£.	£.
1882-83	2,540,055	79,107	2,628,223	2,521,024	50,287
1883-84	2,690,638	50,271	2,746,904	2,702,410	18,207

As regards coercive processes there was an increase of notice-fees, but a decrease in all the severer forms of pressure. The Public Works Irrigation revenue declined from 17,281 l. to 15,504 l.

Agriculture in Sind mainly depends upon the annual inundation, and this being unusually low last year, cultivation was contracted. The cultivated area was returned at 2,611,559 acres against 3,072,949, but the land actually under crops was probably not more than 1,952,035 acres. The revenue for the two years is compared below:—

	Gross Revenue.	Remissions.	Revenue for Collection (deducting Remissions and Alienations).	Collections.	TOTAL Balances.
	£.	£.	£.	£.	£.
1882-83	561,498	24,688	489,002	454,465	61,808
1883-84	527,858	12,100	469,083	444,102	40,819

The amount for collection and the amount actually collected therefore declined respectively 20,878 l. and 10,367 l. Further remissions were also found necessary after the close of the year. Considerable resort is had in Sind to coercive processes, but this is said to be due rather to contumacy than to inability to pay the demand. An examination of the returns for 1883-84 goes to bear this out. In the vast majority of cases where property had been dis-

trained, payment was made before it was actually sold, and out of 67,780 acres of land forfeited, all but some 7,500 were given back to the defaulters.

WARDS' ESTATES.  
Bengal.

The total number of wards and attached estates were 206 against 208 in the previous year, being four less wards and two more attached estates. The year closed with a cash balance of 175,726 l., besides Government securities to the value of 226,401 l. The total income received was 626,913 l. and the total disbursements 629,010 l. Proposed settlement operations on an extensive scale were postponed during the year pending the passing of the Tenancy Bill. An unsatisfactory feature of the year's administration was the unusually large uncollected balance on account of rent and cesses amounting to 568,061 l. against a total current demand of 576,567 l. This is partly attributed to temporary causes, a bad season, and estates with heavy balances coming under management. But it is also explained by the existence of large unrealisable arrears hanging over the ryots, a subject which has engaged the attention of the Bengal Government.

Assam.

There were three wards' estates, as before, in Assam. Their income shows a steady increase under the management. It now amounts to 3,625 l., and the collective cash balance is 1,451 l.

N. W. Provinces  
and Oudh.

The number of estates under the management of the Court of Wards remained at 129, but a serious addition was made to its responsibilities. Though an equal number of estates were released and taken over, the liabilities of the new estates were exceptionally heavy. Fifty-eight per cent. of the estates belonged to minors, and their total liabilities and assets were respectively 275,460 l. and 318,249 l. The system of appointing special managers, thus relieving the district officers to some extent, has been introduced, and works well. The number of notices of ejectment upon tenants rose from 785 to 829, and the area affected from 4,137 to 5,388. The increase has been marked for the last three years, and the orders have been issued permitting the growth of occupancy rights among solvent tenants.

Oudh.

One new estate was brought under management during the year, making the number 63. The direct expenditure on improvements diminished, but there is evidence that the tenants themselves are becoming active in the construction of wells, &c. The debts of the estates were reduced from 237,742 to 194,829.

Punjab.

Thirty-nine estates were under the care of the Punjab Court of Wards, with an aggregate income of 67,198 l. The expenditure was 84,476 l., counting in 30,867 l. devoted to investments. The most important State recently under administration, that of the Nawab of Mamdol, was set free during the year. It is proposed to make several landholders wards of the court on their own application in cases where their estates have become hopelessly involved.

Madras.

Six new estates were taken under management, and four made over to their proprietors, in each case with a balance to their credit, leaving 39 under administration at the close of the year. The area of holdings in the estates settled on ryotwari principles amounted to 566,510 acres; 32,514 l. were paid by them towards the liquidation of debt, 175,571 l. on the education and maintenance of minors, and 173,600 l. on irrigation works and buildings. The total balance to the credit of the estates amounted to over 400,000 l., and the debt due by them to over 190,000 l.

Bombay.

Minors' estates and encumbered estates in Bombay are variously managed under the provisions of several Acts. The most important work of this kind is done by the Talukdari Department created in 1862, which since that year has taken over and released several hundred estates by immediate payment on an average of one-half the liabilities. The cost of the Department is only 4½ per cent. of the revenues administered, and is, therefore, cheaper than a private land agency. It is sometimes administered by the Collector, sometimes directly by the Talukdari Settlement Officer, who is also in charge of minors' estates. There were 31 minors' estates in 1883-84, or three less than the year before. Under the Code of Civil Procedure and other Acts, which empower the borrowing of money from Government for the release of estates, 113 properties were administered, and the total number of estates of all descriptions managed by the Talukdari Department came to 272, with a gross revenue of 66,823 l.

VI.

PRINCIPAL HEADS OF REVENUE OTHER THAN LAND.

NEXT in importance after Land Revenue in the receipts of the Indian Government comes the Opium Revenue. This revenue, which is ultimately paid by the Chinese consumer, and is received in India in the form of a monopoly price charged to the wholesale merchants of Bengal, or of a transit duty levied at the Bombay frontier. In addition, Malwa opium is supplied to the Excise Departments of various provinces. The manufacture of the drug in the Bengal Presidency being conducted by Government agency, the charges are naturally heavy. Bombay opium is grown in the free States of Malwa, and the only expenditure incurred is the payment of weighing clerks on the frontier railway stations. The total gross opium revenue for 1883-84 was 9,556,501 l., of which Bengal contributed 7,046,344 l. The charges came to 1,854,690 l., of which all except 960 l. is assigned to Bengal. The net revenue, therefore, was 7,701,811 l. against 7,216,778 l. in the previous year.

The following statement gives the areas engaged for and cultivated, together with the produce for the Bengal agencies:—

Season.	Area Engaged for.	Land Sown for Cultivation.	Net Cultivation.	Produce at 70° Consistence.
<b>Behar:</b>				
1882-83	<i>Bighas.</i> 477,019	<i>Bighas.</i> 475,459	<i>Bighas.</i> 400,382	<i>Maunds.</i> 49,440
1883-84	463,827	466,772	394,232	27,073
Difference	— 13,792	— 8,687	— 66,150	— 22,366
<b>Benares:</b>				
1882-83	450,474	398,478	389,659	51,440
1883-84	428,521	412,025	398,602	42,213
Difference	— 21,953	+ 14,147	+ 9,293	— 9,226
<b>TOTAL Difference</b>	<b>— 35,725</b>	<b>+ 5,460</b>	<b>— 56,857</b>	<b>— 31,602</b>

A bigha = nearly one-third of an acre. A maund = approximately 80 lbs.

It will be gathered from these figures that the season was an extremely unfavourable one for production in both agencies.

The Behar agency shows a falling-off under every head, while, though the net cultivation increased in Benares, the outturn was less by over 9,000 maunds. The causes of this unsatisfactory state of affairs were unseasonable rain, blight, frost, and caterpillars. As a result the outstanding balances to cultivators, especially in Behar, were unusually heavy. As regards the apprehension that cultivators are getting more inclined to devote their lands to less precarious and uncertain crops than opium, the Opium Commission, which inquired into the working of the Department during the year, pronounced that this tendency is only due to temporary causes. Chief among these has been a series of bad harvests. The substitution of Malwa instead of Bengal opium for excise purposes has again been sanctioned for another year. The Malwa drug is apparently living down its first unpopularity. The number of chests of provision opium

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OPIMUM.

opium sold was 54,400, a decrease of 2,000. The average price per chest was 125 l. 1 s. 4 d., against 122 l. 1 s. 5 d. in 1882-83.

The following statement is for Bombay opium :--

Season.	In Stock at beginning of Year.	Imported.	Exported to China.	Bought for Home Consumption.
	<i>Chests.</i>	<i>Chests.</i>	<i>Chests.</i>	<i>Chests.</i>
1882-83 - - - -	1,623	38,950	37,346	1,315
1883-84 - - - -	1,695	40,976	39,763	1,357

The number of chests weighed and passed at the scales for importation into Bombay was larger than in any of the previous six years except 1879-80. The number exported to China also exceeded the average of the last five years by 3,253 chests. Besides this, 8½ chests were exported to the African coast, and 86½ to Cochin and Mysore. No change was made in the rates of opium duty during the year. The quantity of taxed opium consumed in British districts rose from 106,869 lbs. to 117,668 lbs.

SALT.

The systems of levying the salt duty in India are very various. In Bengal nearly all salt is imported, and the tax is an import duty. In Northern India salt is taxed at the places of manufacture, which have now been brought under the Inland Customs Department. Natural brine is converted into salt at these by solar evaporation. In Madras, where it is almost entirely a Government monopoly, and in Bombay, where the revenue is derived from excise, salt is obtained by the solar evaporation of sea-water. The following table from the Finance Accounts exhibits the salt revenue for the year.

SALT REVENUE.

	Sales of Government Salt.	Excise on Salt Manufactured Locally.	Duty on Salt Imported from England.	Duty on other Imported Salt, Seaborne.	Duty Levied by Inland Customs Department.	Miscellaneous Receipts.	TOTAL.	Charges.	Net Revenue.
	£.	£.	£.	£.	£.	£.	£.	£.	£.
India, General - - -	195,384	13,748	-	-	1,276,500	43,525	1,529,242	167,284*	1,362,038
Bengal - - - - -	-	88,212	1,475,592	255,905	-	8,999	1,820,708	4,317	1,825,481
Madras - - - - -	1,289,829	91,624	185	89	2	3,834	1,385,519	160,650	1,224,854
Bombay - - - - -	33,160	1,337,855	262	992	1,387	6,495	1,380,151	114,218	1,265,933
Burma - - - - -	-	2,950	17,579	-	-	-	20,709	243	20,466
<b>TOTAL - - - £.</b>	<b>1,518,373</b>	<b>1,534,384</b>	<b>1,493,798</b>	<b>257,026</b>	<b>1,277,979</b>	<b>68,853</b>	<b>6,145,413</b>	<b>446,641</b>	<b>5,698,772</b>

\* Including 4,085 l. charges in England.

The net revenue in the previous year was 5,674,954 l. In the last 10 years the total consumption of salt has increased 27 per cent. In 1883-84 the rate of increase showed a tendency to accelerate; 30,555,160 maunds paid duty as against 29,848,273 in 1882-83, and 28,409,387 in 1881-82.

Northern India.

The Northern India Salt Department controls the salt revenue of the following Provinces and Native States: the Punjab, North-Western Provinces, Oudh, Central Provinces, Berar, Rajputana, Central India, and Behar, except in so far as some of them receive their supply from Bengal, Madras, or Bombay. The amount of salt issued by the Department increased by 58,561 maunds, and was derived as before from 10 district sources of supply, including the Trans-Indus Kohat



Kohat mines. The net receipts for 1883-84 and 1882-83 were, respectively, 1,366,123 *l.* and 1,397,114 *l.* Owing to the through traffic system that has lately been introduced, the Punjab mines salt was more largely distributed, and its price was lowered. It is proposed to bring the Kohat mines, which are now under the district officer, within the Department. The combined effect in diminishing smuggling, of reducing the duty Cis-Indus, and of enhancing the selling price at the Trans-Indus mines has been remarkable; only 18 persons were arrested against 213 in the previous year. The working of the Sultanpur Salt Works continued embarrassed by the indebtedness of manufacturers; those at Nuh were closed altogether. Treaty engagements with the Native States worked smoothly during the year, and the price of salt generally seems to have kept low and steady.

SALT.

This was the second year in Bengal in which the uniform reduced duty of 4 *s.* per maund has been levied. The results of this measure hitherto are as follows: in 1882-83 the total receipts fell 26 per cent., while the charges increased 8.5 per cent. Last year the receipts still further decreased 3 per cent., but this was more than counterbalanced by a decrease of 27.7 per cent. in the charges. The net result, therefore, was an increase of 1 per cent., or 2,109 *l.* in the revenue. There was an augmentation both in imported and excise salt during the year, 9,462,565 maunds being imported, and 637,672 maunds locally manufactured. The chief sources of supply of imported salt continued to be the United Kingdom, France, and Bombay. Liverpool importations fell off, owing to low prices and general depression in the eastern trade. An interesting attempt was made, for the first time, by Messrs. Ralli Brothers to import Sardinian salt, and thereby solve the difficulty of obtaining cargoes from the Mediterranean ports. The dry season was peculiarly favourable to the manufacture of salt by solar evaporation. In Orissa it led to a net increase of 357,469 maunds.

Bengal.

Madras salt supplies not only the Presidency itself, but the eastern and southern portions of the Central Provinces and the Nizam's dominions to a great extent. The new uniform rate of duty was brought into force in March 1882. It has resulted as yet in a loss of revenue. On the other hand, the total licit consumption this year was the largest ever known, and exceeded that of 1882-83 by 368,254 maunds. The total amount, 7,456,524 maunds, was made up of 856,108 maunds of imported salt, and 690,111 maunds of excise salt, the rest being manufactured by Government. In 1881-82 the total amount was 6,207,581 maunds.

Madras.

Considerable progress was made in extending the excise system, which is being partially substituted for Government agency.

The Bombay and Sind salt revenues are managed on the same excise system. Since 1881-82 about one-quarter of the total salt in the Presidency has been extracted from the brine wells in the Rau of Cutch. This Baragara salt, as it is called, finds its way largely into the Central Provinces and to Rajputana.

Bombay and Sind.

The total quantity of salt manufactured during the year was 7,912,246 maunds, which exceeded the average of the five preceding years by 1,615,827 maunds. In the nine years ending with 1881-82 the annual consumption per head in the Presidency was estimated at 10.43 lbs. It is now put at 12.73, or one-fifth more.

Salt is taxed in British Burma at the low rate of 4 *d.* per maund, levied as a customs duty on imports, and as an excise duty on manufacture. Local manufacture is apparently decaying everywhere before the competition of imported salt. Last year the total quantity imported and manufactured which paid duty amounted to 1,860,387 maunds, of which more than five-sevenths were imported as against 1,524,171 in 1882-83. The people of Burma eat salt fish and use salt far more freely than elsewhere in British India. The average annual consumption of salt per head among them is estimated at 28 lbs., against 10 lbs. in Continental India.

British Burma.

There remains the manufacture of salt from saltpetre in certain saliferous tracts of the North-West Provinces and Behar, which is controlled by a strong preventive establishment under the Northern India Salt Department. The salt educed is at once bonded, and then either destroyed or removed after payment of duty by the refiners. The total receipts of the Internal Branch for 1883-84 came to 19,887 *l.*

The Internal Branch.

The general reduced rate of duty, 4 *s.* per maund of 82 lbs., first came into operation

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SALT.

operation in 1882-83 over Northern India and Bombay as well as in Bengal and Madras, while different rates still prevail in Burma and in the Trans-Indus districts of the Punjab; the effect of the lower rate on consumption is roughly indicated by a comparison of the amount which paid duty in these two years with the amount in 1881-82, when the varying old rates were in force.

	Northern India.	Bengal.	Madras.	Bombay.
	<i>Maunds.</i>	<i>Maunds.</i>	<i>Maunds.</i>	<i>Maunds.</i>
1881-82 - - - -	6,886,484	9,221,513	6,207,581	4,730,537
1882-83 - - - -	6,708,440	9,498,509	7,008,270	5,202,544
1883-84 - - - -	6,753,729	9,527,343	7,456,524	5,242,065

The total consumption of salt from 1st March 1883 to 31st January 1884 is put at 27,074,000 maunds, against 24,498,000 in the preceding 11 months, or an increase of 10.52 per cent.

STAMPS.

The Stamp Revenue consists of fees upon litigation, and of a tax upon commercial documents, levied in the form of impressed or adhesive stamps. But where fees on litigation are levied in cash they come under the heading of Law and Justice. Similarly labels upon documents of title come under yet another heading, that of Registration of the Stamp Revenue proper; about two-thirds are derived from the litigation fees.

(FROM THE FINANCE ACCOUNTS.)

	India, General.	Central Provinces.	British Burma.	Assam.	Bengal.	North-Western Provinces and Oudh.	Punjab.	Madras.	Bombay.	TOTAL.
	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.
Sale of Court Fee Stamps. -	16,318	88,760	57,124	51,936	919,362	452,182	236,232	362,471	232,430	2,416,836
Sale of Commercial and other Stamps.	19,331	40,999	31,613	22,483	328,772	145,767	101,898	191,008	161,178	1,037,147
Fines and Penalties - -	104	559	583	244	9,159	1,850	1,297	4,279	1,514	13,689
Miscellaneous - - -	35	755	70	102	6,379	816	1,389	4,130	31,954	45,630
<b>TOTAL - - £.</b>	<b>29,788</b>	<b>130,008</b>	<b>89,300</b>	<b>74,755</b>	<b>1,257,692</b>	<b>600,615</b>	<b>340,316</b>	<b>562,486</b>	<b>427,076</b>	<b>3,519,201</b>

Deducting from the gross revenue 39,272 l. on account of refunds, and 174,710 l. on account of total charges in India and England, the net revenue for the year was 3,299,219 l., against 3,256,283 l. in 1882-83.

Bengal.

Madras.  
Bombay.

In Bengal there was a considerable increase in the revenue from court fee stamps, owing partly to the levy of service fees in cash, under the Road Cess Department, being abandoned, and partly to a general increase in litigation. The revenue from commercial stamps slightly fell off, owing, it is said, to bad trade. In Madras the receipts from court fee stamps maintained a steady increase, as it has now done for some years. In Bombay, on the other hand, the sale of all stamps used in mercantile transactions has grown remarkably in the last two years, indicating general business activity, while the receipts from court fee stamps have largely declined since 1879-80. Considerable exemptions from stamp duty have also been lately granted by the local Government.

EXCISE.

The principle on which the Excise Revenue is administered is that of obtaining a maximum of duty with a minimum of consumption. The rates of duty, especially on opium and on ganja (an intoxicating preparation of hemp), are raised from time to time to the highest point that will not stimulate smuggling or illicit manufacture. The bulk of the revenue is derived from the duty on various country spirits made from the juice of the palm tree, rice, Mhowra flower,

flower, &c. The duty on imported liquors is credited to the Customs Revenue, but there is an excise duty of 1½ d. per gallon on beer brewed after the European method. The number of breweries of this kind rose from 16 to 24 during the year, and a large extension of business is expected, as the brewers have recently obtained a contract for the supply of practically the whole of the troops of Northern India, as well as for that of the Bengal Commissariat Department, which they already held. There are three systems of conducting the excise upon country spirits; (1) the Central or Sadar distillery system, where a tax is paid on the removal of spirits from distilleries under Government supervision; (2) the farming system, chiefly in backward tracts, where the number of shops is determined for a given large area, and the monopoly of manufacture and vend in these shops is sold by auction to the highest bidder; (3) a modification of the last, the outstill system, where the right of opening a single still and single shop for retail vend, is similarly put up to auction. In most provinces except the Punjab, where the incidence of excise revenue is lowest, and where the central distillery system is universal, all three methods exist side by side. The revenue from drugs is chiefly obtained from a shop-tax.

The following statement from the Finance Accounts will show the relative proportions of the different items of excise revenue:—

GROSS EXCISE REVENUE.

	India, General.	Central Provinces.	British Burma.	Assam.	Bengal.	North- Western Provinces and Oudh.	Punjab.	Madras.	Bombay.	TOTAL.
	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.
License Fees and Farmers' Rents.	11,430	68,370	55,907	17,448	661,063	174,308	38,890	307,879	307,074	1,704,367
Distillery Fees	88	52,601	7,400	1,026	1,788	146	106	28	8,345	71,473
Still-head Duty	12,523	27,912	9,267	4,373	105,278	215,270	38,202	227,113	313,631	953,560
Duties levied on Drugs	3,507	43,556	46,915	24,170	114,055	75,940	15,768	3,078	31,475	350,212
Duty on Opium consumed in India.	1,068	42,914	103,498	165,316	159,242	53,457	36,834	60,308	96,964	719,291
Fines, Confiscations, Miscellaneous.	1,853	290	1,225	31	513	399	4,443	105	20,100	29,040
<b>TOTAL</b>	<b>30,414</b>	<b>235,643</b>	<b>224,202</b>	<b>212,364</b>	<b>1,042,530</b>	<b>519,003</b>	<b>134,243</b>	<b>601,190</b>	<b>777,289</b>	<b>3,836,901</b>

Deducting the charges, the net revenue, 3,744,602 l., showed a large increase over that of last year, 3,475,348 l.

The Bengal excise receipts from country spirits again rose this year, as did also the revenue from ganja. The effect of the recent enhancement of duty upon this drug appears to have been counteracted by an abundant harvest and diminished cost of production. In the North-Western Provinces and Oudh, the central distillery system chiefly prevails. The excise revenue for 1883-84 was the largest ever known, but this is attributed rather to a high standard of prosperity and improved administration than to any increase in the drinking habits of the people. The revenue from country spirits in the Central Provinces is steadily rising. Rather more opium was issued during the year, but the higher price put upon ganja restricted its consumption. The excise revenue in British Burma declined 2 per cent. Imports of Penang rum from the Straits Settlements still further superseded local manufacture. A larger amount of opium was, however, taken by the licensees. In Madras the total revenue fell off 300 l. The shop licensing system with regard to drugs was discontinued as unsatisfactory early in 1883; since then the right of manufacturing and vending drugs has been sold by auction. It provokes a brisk competition.

The excise receipts in the Bombay Presidency increased from 752,466 l. to 835,176 l., and the number of licenses for the sale of country spirit rose from 2,249 to 2,622. Arrangements for the control of toddy consumption vary very much in different districts. The system of putting a tax upon the palm trees taxed is being introduced where possible. Excise administration in Bombay is hampered

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EXCISE.

hampered by the number of native states in which the excise machinery is defective, and from which, accordingly, smuggling of cheaper liquor is always going on. In order to overcome this difficulty the Bombay Government is gradually acquiring control over the excise management of native territories. Agreements with this object in view were concluded during the year with the states of Kurundbad, Jamkhandi, and Mudhol.

CUSTOMS.

The existing tariff was finally revised in March 1882. Import duties are now levied upon arms, liquors, wines, opium, and salt. Rice is the only article subject to export duty. Excluding the receipts from the import duty on salt, which have already been incorporated in the salt revenue, the net customs revenue for 1883-84 amounted to 1,137,216 *l.*, against 1,088,746 *l.* Bengal contributed 335,995 *l.* of this total, and Burma 517,236 *l.* The receipts from the export duty on rice fell off in both these provinces, more particularly in Burma, where the crop was much damaged by untimely storms. The exports were less by 215,414 *l.*, but somewhat more rice than usual found its way into Upper Burma.

ASSESSED TAXES.

Assessed taxes include a number of direct taxes upon individuals, according to their incomes or means of livelihood, the most important being the license tax upon trades and professions. They practically amount in their operations to a limited income tax. In 1879 the minimum assessable income for all India was definitely fixed at 50 *l.*, while the incidence of the tax is 1½ per cent. The total number of traders paying it is something over 250,000. The net receipts for 1883-84 came to 510,119 *l.*, of which Bengal contributed 148,300 *l.*, Bombay, 122,879 *l.* and the North-West Provinces with Oudh, 114,720 *l.*

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VII.

AGRICULTURE.

THE recommendations of the Famine Commission for creating agricultural departments charged with the duties of organising schemes of famine relief, of introducing improvements into agriculture, and of collecting agricultural statistics, have now been given effect to in every province except the Punjab and Bengal. In Bengal, however, the appointment of a Director of Agriculture was sanctioned towards the close of the year under review by the Secretary of State as a temporary measure. His work will be confined to collecting agricultural statistics and facts, and to advising the Government of Bengal in connection with these matters. The formation of an agricultural department in this Presidency has encountered peculiar difficulties. The whole system of village accounts and accountants, which is the most essential condition of its operations, was broken up in the troubled times that preceded British administration, and has practically disappeared under the Permanent Settlement. All attempts yet made to resuscitate it have resulted in failure.

THE AGRICULTURAL DEPARTMENTS.

The rainfall of 1883-84 was generally deficient and badly distributed in Bengal, and the area irrigated by canals fell off except in the Sone circle, where it increased from 148,583 to 260,230 acres. Harvests in consequence were scanty, and prices advanced, though the large stocks accumulated from the two previous good seasons prevented the rise being very sudden. Generally speaking, though the prices of food stuffs were higher, there was no lack of them in the markets, and roads and railways were able to meet a demand which might have been difficult to satisfy in former years. The cultivating classes were, on the whole, benefited by this rise; persons with small fixed incomes and day labourers were the sufferers. In the Burdwan Presidency, Rajshahye and Dacca Divisions, the people were somewhat pinched; but the steady advance in material prosperity elsewhere was not arrested, and a higher standard of comfort is gradually being recognised among the agricultural classes. Complaints, however, are made that no progress in thrift is observed. The indigo season was a good one, especially in the Doab, and the estimated outturn was 1,64,000 maunds against 1,59,388 last year. Tea cultivation showed a tendency to enlarge. Planting and experiments were carried out in the Botanical Gardens at Calcutta and Dajeeing, and an attempt to introduce better silk worms into Rajshahye was made. Great expectations are based on new experiments with the bark of the paper mulberry, which is expected to prove "an admirable paper material."

SEASONS AND CROPS. Bengal.

*Bengal*

Agricultural statistics in Assam are still inaccurate, and though the Agricultural Department began its work towards the close of 1882, the work of collecting and recording of information is impeded by the want of a properly-trained subordinate establishment. The area of land under cultivation, 1,112,840 acres, was somewhat reduced by floods. Rice is the principal food of the people, but the rice crop is not sufficient for the consumption of the Province, which annually imports over 30 million lbs. from Bengal. In consequence of their proximity to the Bengal rice fields, the Assamese are not constrained to substitute rice for more valuable crops.

Assam.

Except for a shorter rice crop in Oudh, the year was a good one in these provinces. Prices remained steady, and there was a surplus of grain for exportation. Out of the total assessed area of the North-Western Provinces 53 per cent. was actually cultivated, and in Oudh 57. Exact statistics as to the various crops are not available for the year; but the area under wheat extends annually. In 1878-79 it occupied 3,058,339 acres in the temporary settled districts of the North-Western Provinces; since then its cultivation in these districts alone is estimated to have increased by over 500,000 acres.

N. W. Provinces and Oudh.

The Agricultural Department did good work in supervising and training the patwari staff, with a view to the better maintenance of the village records. Interesting results were also obtained on the Cawnpore Experimental Farm with regard to the increased returns given by deep ploughing in the alluvial soil of the Doab. A valuable series of experiments bearing on the reclamation of infertile soil from reh, usar, and other salt efflorescences, was also brought to an end. It was tolerably conclusively established that where canal silt is avail-

SEASONS AND  
CROPS.

able, reclamation can be undertaken with success. Otherwise the only remedy is the doubtful one of allowing the uninterrupted spread of salt-bush and usar grass. The next expense of the department was 6,909 £.

## Punjab.

The weather was variable, but on the whole favourable in the Punjab; harvests were average, and prices exhibited a slight tendency to fall. The total cropped area, 22,497,165 acres, was 900,000 acres less than in 1882-83, but 400,000 more than in 1881-82. The most notable agricultural feature in the Province is the steady growth of the area under wheat, the greater part of which spreads down from the base of the Himalayas, between Hoshiarpur and Rawalpindi. Since 1881-82 it has increased from 6,596,605 acres to 7,209,721. So far it does not seem to have displaced the cultivation of the ordinary millets, or of barley. Rice, however, is largely giving ground, and in a minor degree cotton and sugar cane. In the Peshawar district alone wheat occupied 223,044 acres against 158,502 in the previous year. District committees made some experiments during the year with new plants and also with ensilage. The most successful was an attempt to grow Nankin cotton in Mooltan. Sericulture makes little progress. The Agri-Horticultural Gardens at Lahore were transferred from the Agri-Horticultural Society's management to that of a Government Committee. The net cost for the year was 869 £ against a grant in-aid of 900 £. An interesting quinquennial statement of live-stock was drawn up this year. The returns are better under every head than those of 1878-79; camels alone have increased by nearly 50,000.

## Central Provinces.

The area under cultivation in the Central Provinces increased from 15,516,800 acres to 15,622,400. The season was favourable, and prices remained much the same. The cultivation of wheat advanced by more than 100,000 acres, although the export demand fell off, and that of cotton by 68,000 acres. It is significant that with the opening up of new tracts by the railways, the number of carts used for carrying grain to the stations is steadily increasing. The Agricultural Department is at present chiefly occupied with reorganising the subordinate revenue staff, and taking measures for securing more accurate return of crop areas. The new experimental farm has been of use in demonstrating the value of sewage manure, and a number of experiments were conducted, including the application of ensilage to jowar.

## Burma.

Notwithstanding a somewhat deficient rainfall, the area of cultivation in Burma increased from 3,591,498 to 3,768,353 acres, rice occupying 97 per cent. of the total land cultivated. Although this is a higher per centage than it has ever reached, the export of rice again declined, largely owing to damage done to the crops by storms. Three experimental farms are under the management of the Agricultural Department, which is engaged in trying to introduce new staples and improved implements. Much is expected from a revolution in the mode of curing tobacco, which more than doubles the value of the leaf, and to which the people appear willing to lend themselves. Attempts to cultivate jute have resulted in failure, and this year's results have placed beyond doubt the fact that wheat cannot be profitably substituted for rice on paddy land. Sugar cultivation is making more way, and in Tavoy and Toungoo private enterprise has introduced tea, coffee, and cinchona with some success. The Kaiser and Watt ploughs are regarded with favour by the Burmans, and there is some prospect of the latter being extensively adopted.

## Bihar.

Owing to an unfavourable season, the cultivated area of cotton in the Assigned Districts shrank from 6,567,326 acres to 6,537,802. Locusts were also troublesome. The area under linseed contracted, as well as that under cotton; wheat, on the other hand, occupied 200,000 acres more. Prices rose slightly, and wages remained stationary. Experiments, chiefly confined to producing different varieties of cotton, were made on the farms at Akola and Amraoti.

## Madras.

The rainfall in Madras, 46.77 inches, though lower than the previous year, was nearly an inch above the average of the six years previous to the famine. Statistics of cultivation are available only for inam and ryotwar lands. The extent of these cultivated under first crop increased from 21,474,685 acres to 21,955,903, and under second crop from 1,314,969 acres to 1,524,062. The total cultivation therefore advanced by 3.02 per cent. The increase was notable in the five districts which suffered most from the famine, Cuddapah, Bellary, Kurnool, Salem, and Anantapur; it amounted in these to 73.8 of the total. Compared with the average of the five years preceding the famine, the area of ryotwar lands under first crop (excluding Malabar and South Canara), still shows a decrease

a decrease of 3.5 per cent. In 1882-3 the decrease amounted to 5.53 per cent., and 1881-82 to 10 per cent. The fall in prices which set in three years ago was generally continued, and wages remained almost stationary. The percentage of the various crops to the total cultivated area changed very little; paddy and rice contributed 24.38 per cent. against 24.67 per cent. in 1882-83. Cotton maintained a steady increase, and now occupies 1,738,441 acres. Indigo cultivation has declined. The cause suggested is the fall in the price of the dye. The offices of agricultural reporter and superintendent of Government farms were separated from that of the principal of the School of Agriculture. The work of analysing districts as prescribed by the Government of India proceeded very slowly owing to its minuteness. Plans for facilitating it, and for establishing a staff of kanungoes are under discussion. The Saidapet farm had to contend with great difficulties, an unfavourable season, and subordination for most of the year to the educational necessities of the Agricultural College. The only satisfactory experiment was the growing of Punjab wheat as a garden crop. Not much progress was made in introducing improved agricultural implements. The general complaint is that they are beyond the strength of the cattle and the means of the cultivator. The expenditure of the department came to 9,222 l., the receipts to 4,546 l., while a new agency for cattle diseases inspection was organised.

SEASONS AND CROPS.

The total cultivable area bearing assessment in the Bombay Presidency and Sind. amounted to 24,897,345 acres, of which 22,526,031 were actually cultivated during the year. The proportions of irrigated land and dry-crop land (about 97 per cent. of the whole) remained nearly the same as before. The area under wheat considerably extended. The first report from the Director of Agriculture was received this year. The collection of accurate economical and agricultural statistics is the first duty of the department, and an efficient sub-agency for assisting in this work is being organised. The operations of the department should also reduce the uncertainty and expense attending revision settlements. The survey record in Dharwar, where a revision settlement has just been completed, has been made over to the Director of Agriculture. The Government farms have also been placed under his supervision. At Bhadgaon bad weather resulted in a disastrous loss of crops and animals. The Hyderabad Farm was much more successful, and the financial deficit on it was only 78 l. The growing demand for Strachan-Bayliss ploughs considerably exceeded the supply.

Bombay.

The area under food grains in Coorg remained much the same, but the coffee plantations again received a heavy blow. Considerable difficulty was experienced for the first time in procuring labour, and prices declined steadily. Cinchona as well as tea is now being substituted in Coorg for coffee, the area under cinchona being doubled during the year. The failure of the coffee estates will be a serious matter for Coorg. They still employ nearly 27,000 people, and another 20,000 find temporary work in the picking season. But all over India the coffee plantations are threatened by external competition, chiefly from Brazil. In 1883-84, 185,839 acres were returned as being under coffee for all India. Their total yield was 30½ million pounds, or a slight advance on that of 1882-83, an exceptionally bad year, but considerably below the average formerly attained.

Coorg.

COFFEE.

The cultivation of tea, on the contrary, received a decided impetus. There were 260,571 acres actually planted, or 12,000 more than in 1882-83, and considerably more than 100,000 additional acres were taken up for plantation. But perhaps the following comparison will give the best idea of the growth of tea planting. During the last nine years the acreage under tea has increased by nearly 109 per cent., and the total outturn, 65,906,699 lbs., has increased 149 per cent. during the same period. Assam still remains the most important province of India for tea, and alone produced more than 52 million lbs. of the whole outturn. The area of the gardens increased from 178,851 acres to 189,453, and the approximate average yield of mature plants per acre is estimated at 323 lbs. against 290 lbs. in the previous season. In Bengal the number of plantations diminished, but the area under tea, especially in Darjeeling and Julpigoree, was nevertheless larger. In the Punjab the cultivation of the plant has been abandoned in Simla, and has now been restricted to some 8,000 acres in Kangra. In Madras and Travancore the plantations remain much the same as before; in Burma tea was grown experimentally for the first time with fair success.

TEA.

COTTON.

There are probably about 14 million acres altogether under cotton in India; the statistics for the year put it at 13,941,354 acres against 12,924,196 in 1882-83. But Bengal and Assam are excluded from the return, and in these provinces cotton cultivation, though comparatively unimportant, still exists. Its cultivation increased very largely in Bombay, both in British Territory and in the Native States, in the North-Western Provinces, in Madras, and in the Nizam's dominions. As regards Madras it has more recovered the falling-off of 45 per cent. in the famine years, and occupies an area 7·8 per cent. greater than in 1875-76. In Berar, owing to a bad season, the cultivation somewhat contracted, and in Bombay the outturn was indifferent for the same reason. The total outturn for all India is returned at 7,165,419 cwts. for 1883-84. But this estimate is very untrustworthy.

WHEAT.

The estimated area under wheat in all India was returned at nearly 26 million acres in 1883-84. The statistics, which give 20 million acres for British India, are fairly accurate, but the figures assigning the remaining six million to the Native States are avowedly obtained by a more general calculation. The three principal wheat-producing Provinces are the Punjab, the North-Western Provinces and Oudh; and the Central Provinces. In round numbers they contributed, respectively, seven million, six million and a quarter, and four million acres to the total. In Bombay wheat occupied about one and a-half million acres.

CINCHONA.

No information is yet obtainable as to the private plantations of cinchona which have been established in Madras, Coorg, and Mysore. The Government plantations in Bengal and Madras improved during the year, and the plantation at Thandaung in Burma did well.

Bengal.

Planting operations in Bengal were chiefly confined to replacing the red-bark trees by the yellow-bark variety, which is richer in quinine. The total number of trees, 4,740,311, was about 30,000 more than last year. The crop fell considerably short of the previous year's, consequent upon a lesser demand, while the cost of production also rose. In Madras much was done to remedy the bad condition into which the estates had drifted. The practice of uprooting one variety and replacing it by another, in order to meet a temporary demand, was discontinued, and the total number of trees was brought up from 967,795 to 1,315,446. Most of these, however, are young, and only two out of the six estates are at the present productive. The yield of bark was 1,83,765 lb. against 1,27,712 lb. in the previous year. The most important occurrence in connection with the Madras plantations was the substitution of local sales for home shipments. Even with low prices in Madras 1 s. 6 d. per lb. was obtained for the bark, whereas in London the average net price, after deducting freight, was only 1 s. Nearly 60,000 lb., out of 94,000 lbs. sold, were accordingly got rid of in Madras.

Madras.



VIII.  
FORESTS.

GOVERNMENTS forests in India are divided into three classes. Reserved forests, so constituted under the Indian Forest Act of 1878, entirely devoted to the production of forest produce. These forests are surveyed and accurately demarcated; existing rights to make use of them are carefully investigated and determined. Next after these come the protected forests, to which a limited amount of protection is accorded, without detailed survey or settlement of rights. Finally there are the district, or, as they were formerly called, unreserved forests, where the Forest Department only interferes so far as to levy dues upon their produce. The following table will give the Government forest area for 1883-84, in square miles:—

	Reserved Forests.	Protected Forests.	District Forests.	TOTAL.
	Sq. Miles.	Sq. Miles.	Sq. Miles.	Sq. Miles.
Bengal	4,035	2,300	4,325	11,260
Assam	2,314	863	6,422	9,599
North-West Provinces and Oudh	3,331	99	118	3,548
Punjab	1,022	311	2,010	4,243
Central Provinces	19,429	-	319	19,748
Burma	3,759	-	-	3,759
Bejar	1,635	-	2,760	4,395
Ajnere	139	-	-	139
Coorg	233	-	-	233
Biluchistan	-	-	8	8
<b>TOTAL under Supreme Government</b>	<b>36,497</b>	<b>3,573</b>	<b>10,862</b>	<b>56,932</b>
Madras	2,870	-	-	2,870
Bombay	9,398	5,012	-	14,410
<b>GRAND TOTAL</b>	<b>48,765</b>	<b>8,585</b>	<b>10,862</b>	<b>74,212</b>

Compared with last year the reserved forests have increased by 873 square miles, and the protected by 15 square miles. The area of district forests, however, which is still merely an estimate, has been reduced by 2,000 square miles through corrections and transfers. The revenue of the Forest Department is obtained from the sale of produce and from dues on grazing rights, &c. There is a growing tendency to substitute private for Government agency in the felling and removing of timber. It is not so immediately remunerative, but leaves the forest officers free for the work of conservancy.

The following table from the Finance Accounts gives the forest revenue for the year 1883-84. The figures do not agree accurately with those of the Forest Reports, which are discussed in the subsequent paragraphs, owing to the inclusion of items of expenditure and receipts in England:—

	India General (including England).	Bengal.	Assam.	North-Western Provinces and Oudh.	Punjab.	Central Provinces.	British Burma.	Madras.	Bombay.	TOTAL.
	£.	£.	£.	£.	£.	£.	£.	£.	£.	£.
Receipts	13,371	60,483	21,145	161,138	91,018	99,477	259,928	95,370	250,310	1,052,190
Expenditure	23,570	38,770	10,744	104,110	65,008	48,585	121,606	78,509	154,463	649,375
Net Revenue	-10,209	50,663	1,401	57,028	26,010	50,892	138,322	26,861	95,847	402,815

FORESTS. The gross receipts for the previous year were 928,228 *l.*, and the net income was 367,957 *l.* This year's net receipts, therefore, show an improvement of 34,858 *l.*

Bengal. There was a nominal decrease from 11,754 square miles to 11,260 square miles in the forest area due to correcter measurements, but 525 square miles were gazetted as additional reserves. The superior staff of the department was increased from 14 to 16, and the position of the native subordinates was improved, as great difficulty is experienced in Bengal in attracting educated natives into the service. Owing to charges connected with the Calcutta Exhibition, the net revenue, 30,652 *l.*, fell off 525 *l.*; the gross receipts, 69,433 *l.*, were much the same as before. Cultural operations covered 2,568 acres against 2,329, and new grazing rules were introduced with the object of facilitating natural reproduction. The number of forest cases taken into courts rose from 73 to 413, but the total number of forest offences probably remained much the same, and the increase is due to the attention devoted to this branch of administration by the officers of the department, who have been recently liberated from the duties of supervising timber and fuel operations.

Assam. Forestry in Assam had to contend with unusual difficulties. The season was exceptionally hot and dry, and fires did severe damage. Sixty-one square miles were burnt out of two hundred and nine attacked. The timber market in Bengal was also very dull, and the demand for Assam woods fell off. As a result of this and of the increased cost of fire protection, the total receipts of the departments shrank from 24,860 *l.* to 21,144 *l.*, and the net receipts were only 1,188 *l.* against 7,678 *l.* in 1882-83. Prosecutions were 86 against 50, and renewed attention was called to the question whether forest reclamation materially interferes with the life of the Assamese. Detailed returns on the subject are called for next year. The forest area is now returned at 9,599 square miles.

N. W. Provinces and Oudh. In these Provinces both the financial and administrative results were the best ever known. The extension of the private agency system led to larger receipts in the Central circle; in Oudh, departmental agency met the urgent demands of several railway companies for sleepers. The net receipts were 56,950 *l.*, or more than three times as much as in 1882-83. The forest area increased from 3,439 to 3,479 square miles, of which 3,380 are what is technically as "reserved forest." In the North-Western Provinces the forest survey approached completion, and in Oudh 161 miles of the Nipal Boundary were demarcated. The number of prosecutions was much the same as before; protection from fire was rendered difficult by a dry season, and four times as much woodland was damaged as in 1882-83.

Punjab. The relations between the District and Forests Officers were defined by the Local Government during the year, the object being to bring them into closer association. This change is calculated especially to improve the administration of waste lands, of which 12,300 square miles are now under the management of district officers. Special attention was devoted to pushing on the forest survey, as more than half the forest area of the Province still remains unsurveyed. The area under the administration of the department was 4,619 square miles against 4,694 in the previous year. The financial results were however unusually satisfactory, in spite of a payment of 6,000 *l.* to the Kashmir Durbar under the orders of the Government of India. The gross receipts amounted to 91,617 *l.*, and the net income to 25,703 *l.* against 20,596 *l.* in 1882-83. The number of forest offences, 968, rose slightly, but most of them were of minor character.

Central Provinces. In the Central Provinces the forest revenue is important and increasing. It rose this year from 97,764 *l.* to 99,476 *l.*, but the net receipts, 55,871 *l.*, were 668 *l.* less owing to larger salaries consequent on promotions, and a greater expenditure. The area under the department, 19,458 square miles, remained the same. Changes were introduced into its classification, 842 square miles being transferred from the second to the first class reserves. The number of forest cases taken into court, 343, were fewer. Fires are always a great danger in the Central Provinces; wide paths are cut through the forests to keep them from spreading, and this year belts of evergreen were planted along them. But for a very severe fire in the Chandgar reserve, which burnt over 32,000 acres, the returns of fire protection would have been better this year. There is evidence to show that this was lighted at several places by a daring band of dacoits in order to cover their retreat.

Burma,

Burma, with its immense teak-woods, contributes far the largest item to the total forest revenue of India. This year both gross and net receipts continued to increase. They were respectively 250,927 *l.* and 129,112 *l.* against 250,389 *l.* and 127,494 *l.* in the previous year. But this improvement will hardly be maintained, as the price of teak fell rapidly before the close of the year. The total yield of timber from the Burmese forests was 113,857 tons, or an increase of 15,360 tons. But the yield of teak itself fell off by 7,878 tons, and its place was taken by other woods. The reason is to be found partly in local causes, partly to the high prices ruling for teak in the beginning of the year, which stimulated the demand for other timber.

FORESTS.  
Burma.

The imports from Upper Burma rose from 158,408 to 217,235 tons, and were the largest ever known. The formation of reserves makes steady progress, the reserved area being extended from 3,457 square miles to 3,759; but the proportion of the reserved area to the total area of the province is still only 4 per cent. The department's plantations also increased from 11,312 acres to 13,415, and employment was found for the wild Karens in connection with these operations. A fresh inquiry was made into the effect of the forest rules upon the Karen population. Apparently they do not press upon it severely; but there is very little prospect of the Karens of this generation being reconciled to the new order of things. The number of forest offences in Burma is insignificant; only 193 persons were taken into court.

New forest regulations for Berar are now under consideration by the Government of India. For some time past there has been considerable friction between forest officers and district revenue officers, the results being disastrous, especially as regards fire protection. This difficulty has now been obviated by placing the forest officers in direct subordination to the deputy commissioners, the conservator exercising a financial and general supervision. The department was chiefly engaged in the difficult work of classifying all waste lands not hitherto appropriated as State reserves. This is broadly divided into land available for cultivation, and grazing grounds or woodland. The inquiry involves numerous interests, and in Berar, which is so fortunately situated as practically to be in no danger of a deficient rainfall, the people resent grazing restrictions which are necessary in other provinces where the grass supply is more precarious. Hence the work of classification is slow and provisional. As at present sketched out it would set apart 20 per cent. of the total area of the province for woodlands and grazing grounds, and make 479 square miles available for cultivation. Good progress was made in survey work during the year, especially in Melghat, where 1,103 square miles were triangulated. The revenue is chiefly derived from the unreserved forests at present, and two-fifths of it come from the sale of grass and from grazing dues. The financial results of 1883-84, yielding a net surplus of 15,167 *l.* against 13,706 *l.* in 1882-83, were the best on record. Forest offences were fewer and of insignificant character; but the area damaged by fire, 148,11 acres, increased by one-half.

Berar.

The sudden and unexplained falling away in the demand for sandal wood is a curious feature of the year in Coorg. Only 36 tons were sold against 192, and this naturally affected the forest revenue adversely. Net receipts declined from 7,321 *l.* to 1,279 *l.* As the demand for sandalwood seems so precarious, and as in any case this timber takes 40 years to mature, teak was substituted for it on the plantations. The area of reserved forests in Coorg is 233 square miles.

Coorg.

Considerable changes in the Madras Forest Administration were carried out this year. The Forest Act (Madras Act V., 1882), under which five classes of forests are constituted, came into force in January 1883, and the Jungle Conservancy Fund, which was employed in maintaining jungles in which villagers and others exercised prescriptive rights, was finally amalgamated with the Forest Department. In addition the subordinate establishment was reorganised. These alterations brought down the net receipts from 26,157 *l.* to 17,807 *l.*, although the gross revenue was 95,899 *l.* against 90,644 *l.* In the Southern Circle, 683 square miles of forest land were constituted reserves under the new Act, and additions are further proposed which will include important sal forests in Ganjam. The number of prosecutions largely increased in both the circles into which Madras is divided for purposes of forest administration; 521 cases were tried in the Northern, and 563 in the Southern circle. Protection against fire was unusually successful, only 8 per cent. of the total area, for which protection was attempted, being burnt in the north, and not more than 1.26 per cent. in the south.

Madras.

FORESTS  
Bombay.

The Bombay Presidency, excluding Sind, is divided into two circles like Madras. Important changes were effected during the year under review in the superior establishment, resulting in a considerable increase of strength. The total forest area of the Presidency (including Sind) rose from 14,002 to 14,409 square miles. In Sind all the forests belong to the reserved class; at present they only cover an area of 625 square miles, but large additions are notified. In Thana and other places, special inquiries were held into the question of grazing rights, &c., and the settlements made appear to have given general satisfaction. They coincide with a marked decrease in forest offences. In the Northern Circle the number of prosecutions fell from 1,649 to 907; in the Southern from 295 to 198. In neither circle was the record of fire protection satisfactory, the people not lending very active co-operation, and in Sind 73 fires occurred as compared with 30 in the previous year. No plantations on a large scale have recently been made. In Sind the eucalyptus has shown itself able to thrive in spite of the hot winds. At Kadra, more than third of 12,000 young casuarina trees were destroyed by a species of grasshopper which hides in the sand during the day, and commits its depredations at night, but in Kanara the locust plague happily ceased. In spite of the larger expenditure on establishments the demand for railway sleepers and timber of all kinds increases the gross and net receipts, which were respectively 186,060 *l.* and 85,919 *l.* against 164,366 *l.* and 69,657 *l.* in 1882-83. In Sind unusual traffic on the Indus Valley State Railway resulted in an exceptional demand for firewood, and the net revenue rose from 13,310 *l.* to 15,791 *l.*

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## IX.

## PUBLIC WORKS.

To understand the importance of public works in India, it may be sufficient to note that the expenditure under this head had risen from 2½ per cent. of the total expenditure of Government in 1852-53 to nearly 22 per cent. by 1872-73. Since then it has advanced to 33 per cent. The classification of public works is threefold; what are now known as Productive, and formerly were known as Extraordinary Public Works, may be taken first. The older designation intimated that this class of public works was not paid for out of the ordinary revenue of the year, but out of special loans independent of it. When the name was changed to "productive" a stricter definition was introduced. Productive public works are those which afford a reasonable prospect of remunerativeness in a definite time. In the case of railways the net earnings must be expected to repay 4 per cent. on the total capital expended within five years from the date of opening. In the case of canals the period is 10 years. In 1879 two millions and a-half was fixed as the limit of the sum to be borrowed annually for productive public works. About 1,800,000 *l.* of this has usually been apportioned to railways. Moreover, even in cases where productive public works have not been entirely constructed out of borrowed money, the whole capital outlay is entered as a loan for financial purposes. Further, besides public works which are the absolute property of the State, the guaranteed railways are also included under the financial accounts of this heading. Ordinary public works, or public works other than productive, occupy the second place. As their name implies, these are paid for out of the ordinary or current revenue. There is no test of remunerativeness. Ordinary public works are civil and military roads and buildings, and non-remunerative railways and canals which it has been found necessary to make for various reasons. The third and final class of public works took its origin in the recommendations of the Famine Commission, and first appears in the accounts for 1881-82. Protective public works are undertaken to defend given tracts of country against famine, quite apart from considerations of remunerativeness. An annual sum of 1,500,000 *l.* is set apart every year for famine relief, independent of the ordinary grant for public works. Any portion of this sum not required for the actual relief of distress is devoted either to "protective public works," or to the reduction of the debt. The administration of the expenditure on public works, again, falls into the three great divisions of Imperial, Provincial, and Local. The expenditure on military works, for instance, is entirely Imperial; while local expenditure on public works is mainly confined to civil buildings and roads. These divisions have been kept separate in the two following tables, while a special column has been devoted to the transactions which took place in England. They comprise together the whole series of financial transactions undertaken by the State in connection with public works for the year 1883-84. No. 1 gives everything entered on the expenditure side of the account, and also the capital outlay on productive public works.

PUBLIC WORKS.

46 STATEMENT EXHIBITING THE MORAL AND MATERIAL

No. 1.—PUBLIC WORKS EXPENDITURE, 1883-84.

	India, Imperial.	England.	Provincial.	Local.	TOTAL.
<b>PRODUCTIVE :</b>	£.	£.	£.	£.	£.
State Railways (Working Expenses) - -	1,261,037	-	444,618	-	1,705,655
East Indian Railway (Working Expenses) -	1,996,842	-	-	-	1,996,842
Guaranteed Railways (Surplus Profits) -	637,272	-	-	-	637,272
Irrigation and Navigation (Working Expenses).	213,462	43	301,312	-	514,817
State Railways (Interest) - - - -	1,027,074	-	302,697	-	1,329,771
East Indian and Eastern Bengal Railways (Interest).	192,699	311,593	-	-	504,292
Irrigation and Navigation (Interest) - -	304,143	-	463,161	-	845,324
Annuities in purchase of Guaranteed Railways.	-	1,203,118	-	-	1,203,118
Guaranteed Railways (Interest) - - -	12,521	3,284,241	-	-	3,296,762
<b>TOTAL - - - £.</b>	<b>5,723,070</b>	<b>4,798,995</b>	<b>1,511,808</b>	<b>-</b>	<b>12,033,873</b>
<b>OTHER THAN PRODUCTIVE :</b>					
State Railways (Capital Account) - -	79,040	-	-473,367	-	-394,327
State Railways (Working Expenses) - -	147,626	-	10,075	-	157,701
Subsidized Railways - - - - -	47,616	27,801	6,957	-	82,374
Southern Mahratta Railway - - - -	85,568	-	-	-	85,568
Frontier Railways - - - - -	102,832	97	-	-	102,929
Irrigation and Navigation - - - - -	613,861	1,591	232,831	2,621	750,904
Military Works - - - - -	1,012,303	5,825	-	-	1,018,128
Civil Buildings, Roads, and Services - -	1,005,360	86,515	2,131,812	1,553,757	4,777,444
<b>TOTAL - - - £.</b>	<b>2,994,206</b>	<b>121,829</b>	<b>1,908,308</b>	<b>1,556,378</b>	<b>6,580,721</b>
<b>PROTECTIVE :</b>					
Railways - - - - -	626,461	-	-	-	626,461
Irrigation - - - - -	283,191	26	-	-	283,217
<b>TOTAL - - - £.</b>	<b>909,652</b>	<b>26</b>	<b>-</b>	<b>-</b>	<b>909,678</b>
<b>GRAND TOTAL - - - £.</b>	<b>9,626,928</b>	<b>4,920,850</b>	<b>3,420,116</b>	<b>1,556,378</b>	<b>19,524,272</b>
Capital Expenditure on Productive Public Works -					
State Railways - - - - -					3,003,071
East India Railway - - - - -					743,617
Eastern Bengal Railway - - - - -					55,952
Irrigation - - - - -					709,684
Madras Canal - - - - -					12,785
Miscellaneous - - - - -					-533,070
<b>TOTAL - - - £.</b>					<b>3,992,029</b>
Add,—Transferred from Ordinary -					4,020,134
<b>G RAND TOTAL - - - £.</b>					<b>27,536,435</b>

Similarly

Similarly, everything entered on the revenue side is comprised in table PUBLIC WORKS, No. 2.

No. 2.—PUBLIC WORKS REVENUE ACCOUNT, 1882-83.

	India, Imperial.	England.	Provincial.	Local.	TOTAL.
<b>PRODUCTIVE:</b>	£.	£.	£.	£.	£.
State Railways (Gross Earnings) - -	2,325,422	-	756,826	-	3,032,248
East Indian Railway (Gross Earnings) -	4,999,170	230	-	-	4,999,400
Guaranteed Railways (Net Traffic Receipts).	3,688,143	-	-	-	3,688,143
Irrigation and Navigation (Direct Receipts).	284,634	-	651,947	-	936,581
Irrigation (Land Revenue) - - - -	534,126	-	-	-	534,126
<b>TOTAL - - - £.</b>	<b>11,831,504</b>	<b>230</b>	<b>1,408,773</b>	<b>-</b>	<b>13,240,507</b>
<b>OTHER THAN PRODUCTIVE:</b>					
State Railways - - - - -	172,899	-	14,079	-	186,978
Southern Mahratta Railway - - - -	77	2,645	-	-	2,645
Irrigation and Navigation - - - -	30,886	-	107,898	3,088	-
Military Works - - - - -	44,002	-	-	-	44,062
Civil Buildings, Roads, and Services - -	7,044	18,575	343,434	137,210	504,263
<b>TOTAL - - - £.</b>	<b>254,968</b>	<b>19,220</b>	<b>465,411</b>	<b>140,298</b>	<b>872,897</b>
<b>GRAND TOTAL - - - £.</b>	<b>12,086,472</b>	<b>19,450</b>	<b>1,874,184</b>	<b>140,298</b>	<b>14,120,404</b>

The financial results of the year for productive public works can be shown simply by setting off the revenue and expenditure against each other. There was a surplus revenue, or actual profit, from this class of public works of 1,206,634 l. During the whole 10 years, however, from 1874-75, productive public works have given a deficit of 1,550,457 l. In the case of public works other than productive the financial results cannot be ascertained in this way. This is partly because the expenditure includes capital outlay, and partly because much of the revenue consists in miscellaneous and indirect receipts. The total expenditure on productive public works in the 10 years from 1874 75 amounts to 89,040,309 l. That on public works other than productive for the same period is 60,316,850 l., while 1,793,420 l. has been expended upon protective works since 1881-82.

The figures in the above tables and calculations have all been taken from the Finance Accounts, and it must be premised that they do not always agree with those of the Public Works Reports, on which the subsequent paragraphs referring to railways are founded. The reason is, that the figures are not always compiled on the same principles, and do not always cover the same period.

The three systems on which railways have been constructed and worked in India are the Guaranteed, the State, and the Assisted, though each of these, again, admits of sub-division. The original great trunk lines of India are due to the guaranteed companies. The contract between them and the Government was as follows: the Government gives the land required free of charge; it also guarantees interest at the rate of 5 per cent. on the share capital raised with its consent, and a lower rate upon debenture capital. A general supervision of the working of the railway is also retained, and stores and transport supplied on favourable terms. If the net profits in any half-year fall below a certain amount of guaranteed interest the Government makes up the deficiency. If they exceed this amount the surplus is equally divided between the Government and the company. Moreover, the Government has the right of buying the undertaking at specified dates, on payment of the value of the shares calculated at their market price on the average of the three preceding years. In this way the East Indian Railway was acquired in 1880; and the Eastern Bengal Railway, which, in the last year of its independent working, had given a dividend of 7.43

## RAILWAYS.

per cent. on the total capital expenditure, was taken over in July 1884. In 1870 a new policy of railway development by the direct agency of the State was inaugurated. These State railways are either productive or other than productive, the first designation being restricted to those which yield a return of 4 per cent. within four years from the opening. Their construction may be paid for out of borrowed money. Other than productive, which include frontier railways, are paid for out of current revenue. State railways, again, are either imperial or provincial. Finally, in 1880-81 a return was made to the system of encouraging private enterprise by State assistance, and the financial results yielded by Indian railways were placed before the public as an indication to private enterprise of the returns to be expected from investments in future undertakings without a permanent Government guarantee. The amount of assistance given to the subsidised or assisted railways varies, but it always includes a free gift of the land, and carries with it an option of purchase by the State.

The year 1884 has been an important one for railway development in India. In July the Select Committee of the House of Commons appointed to inquire into and report upon the necessity of more rapid railway extension issued its Report. The general conclusions of the Committee were in favour of accelerating the rate of construction, on the understanding that this should involve no additional taxation. They recommended, however, that the limit of borrowing for public works, fixed at 2,500,000 *l.* in 1878-79, might safely be enlarged to 3,500,000 *l.*, the greater part of this to be devoted to railways. The recommendation has since been adopted. Stress was laid upon the importance of avoiding breaks of gauge, and the leading trunk lines and their feeders are to be confined to the broad gauge.

In India itself, moreover, two important Bills relating to railways were introduced and circulated. The new Railway Act aims at consolidating and amending the existing law, and the New Land Acquisition Mines Bill has for its object the easier and more economical acquisition of land in mineral districts for railway purposes. Some important extensions were also sanctioned, especially with regard to frontier railways. The Sind-Pishin is to be extended 165 miles, and the Sind-Sagar 313.

The Katni-Umaria section of the Bilaspur-Etawah line, the object of which is to bring the Rewah coal-fields in connection with the Indian railway, was also sanctioned, and the Lucknow-Sitapur-Siraman is to be pushed on 124 miles. Besides these extensions, 6,000 miles of projected railway either have been surveyed or were under survey.

The year was also a remarkable one financially, and indicates the possible fluctuations to which railway receipts in India may be subject. The net receipts fell off by 508,884 *l.*, and the percentage of net receipts to capital outlay declined from 5.9 to 5.27. There is reason, however, for believing this check to be merely temporary. It was due to two assignable causes. The first of these was stagnation in the export trade, particularly of grain, owing to good harvests and low prices in other countries. The tonnage of grain moved was alone less by nearly 500,000 tons, but out of the total of 45 items registered in the traffic tables, 27 showed an increase. Secondly, the large extension of open mileage, 1,080 miles, on which traffic has not yet had time to develop, must also have exercised a considerable influence in lowering the dividend. The general results of the year may be summarised as follows: the total length of railways open for traffic during the year was 12,004 miles, of which 6,906 miles were worked by companies, 4,434 were State lines, and 664 belonged to Native States. The mileage under construction amounted to 3,355 miles. The total capital outlay returned for railways and connected steamer services has now grown to 155,450,366 *l.*, of which 105,319,144 *l.* has been spent by guaranteed companies, including the East Indian Railway. Compared with 1883 the gross receipts were 16,066,225 *l.* against 16,389,381 *l.*, while the working expenses were 8,156,157 *l.* against 7,970,430 *l.* The net revenue fell from 8,418,951 *l.* to 7,910,068 *l.*, of which the East Indian Railway, including the State branches worked by the company, contributed 2,795,414 *l.* The number of passengers carried was 73,815,119, as compared with 65,098,953 in the previous year, and the receipts from passengers advanced from 4,606,905 *l.* to 5,070,754 *l.* The aggregate tonnage moved came to



to 16,663,007 tons, against 16,999,264 tons, and the receipts from goods traffic RAILWAYS. decreased from 11,288,861 l. to 10,565,941 l.

The following table gives a view of the working of the various classes of railways for 1884, the East Indian Railway being reserved in a class by itself on account of its importance, although it is now properly a State line. The figures for total capital outlay and for receipts include steamboat services and ferries.

RAILWAY STATISTICS, 1884.

CLASS.	Length of Line Open.	Total Capital Outlay.	Weight of Goods Carried.	Gross Earnings.	Working Expenses.	Net Receipts	Percentage of Net Receipts to Capital Outlay.
	Miles.	£.	Tons.	£.	£.	£.	£. s. d.
East Indian - - - -	1,509	35,065,067	4,370,211	4,483,098	1,686,685	2,796,413	7 13 7
Guaranteed - - - -	4,258	70,253,477	7,611,082	7,329,953	3,932,767	2,397,185	4 10 9
State Railways - - - -	4,434½	42,924,898	4,149,277	3,829,269	2,230,115	1,609,156	3 17 5
Native States - - - -	663½	3,783,065	377,668	272,861	158,047	114,812	3 - 8
Assisted Companies - - - -	868½	3,433,259	145,739	141,045	148,543	-- 7,497	-
TOTAL - - - -	12,004½	155,450,866	16,663,907	16,066,225	8,156,157	7,910,068	5 1 9

The transactions of the guaranteed lines deserve separate notice. Excluding steamboat items, and converting the rupee into sterling at the contract rate of 1 s. 10 d., the total capital outlay on guaranteed railways up to the end of 1884 was 68,769,369 l., and the net revenue earned was 3,207,313 l., or a return of 4.66 per cent. The guaranteed interest for the year was 3,243,015 l. There was therefore a difference of 35,702 l. which the State had to make up. Since these undertakings were begun a total sum of 64,393,736 l. has been advanced as interest by the State to the companies, and their total net earnings, exclusive of half of any surplus profits realised, have amounted to 38,444,123 l., leaving a net amount of 25,949,613 l. charged against the State. It is worthy of notice that the receipts from the guaranteed railways for 1884 exceeded the Budget Estimate by 149,143 l. The improvement chiefly occurred on the Bombay and Baroda line, where the traffic was increased by the through opening of the Rajputana-Malwa Railway, and also on the Oude and Rohilkhand. The receipts of the Eastern Bengal Line suffered severely from the failure of the jute crop. The difference between the net receipts and guaranteed interest for the last three years, and also for 1879, the last year in which the East Indian Railway was included, are shown in the next statement.

GUARANTEED RAILWAYS.

YEAR.	Capital Expended to 31st March.	Net Revenue for Year to 31st December.	Guaranteed Interest for Year to 31st December.	Interest in excess of Revenue.	Revenue in excess of Interest.
	£.	£.	£.	£.	£.
1879 - - - -	96,444,666	5,062,188	4,748,233	- -	313,955
1882 - - - -	67,021,755	3,319,439	3,279,407	- -	40,032
1883 - - - -	67,431,448	3,542,978	3,289,439	- -	253,534
1884 - - - -	68,769,369	3,207,313	3,243,015	35,702	-

## IRRIGATION.

Irrigation in India is either a necessity to agriculture, as in Sind and parts of the Deccan, or it may be the best means of regulating and distributing the water supply, as in Madras. Many of the existing canals have been made on the lines of former constructions by the Native Governments. Since 1883, when the Madras Irrigation and Canal Company were purchased by Government, the entire irrigation of India, except petty works belonging to the cultivators, has been supplied and managed by the State. As in the case of railways, irrigation works are divided into productive and other than productive, about 700,000 l. a year being annually devoted to irrigation out of the total grant of 2,500,000 l. for productive public works. In Bengal the productive irrigation works do not succeed in earning enough to pay expenses. In the North-West Provinces there is a surplus, though it declined this year from 3.10 per cent. to 2.95. Madras also returns a fair surplus, but Bombay yields no interest, and the Punjab but the barest surplus. The following statement from the Finance Accounts will show the financial results for 1883-84 in each Province, and also in all India, compared with that of 1882-83.

## RESULTS of "PRODUCTIVE" IRRIGATION WORKS, 1882-83, 1883-84.

	Capital Outlay to End of Year.	Total Revenue.	Total Expenditure.	Excluding Interest.		Interest.	Including Interest.		
				Excess Revenue on Ex- penditure.	Rate Per Cent.		Excess Revenue on Ex- penditure.	Rate Per Cent.	
	£.	£.	£.	£.	£.	£.	£.	£.	
Bengal - - -	1882-83	5,331,729	131,733	115,003	16,770	30	211,550	-194,780	-3.65
	1883-84	5,472,070	116,984	106,063	10,001	18	216,076	-206,076	-3.76
North Western Pro- vinces and Oudh	1882-83	6,062,948	615,534	187,842	427,692	7.05	239,993	+187,699	+3.10
	1883-84	6,187,159	622,201	194,372	427,829	6.92	245,002	+182,327	+2.95
Punjab - - -	1882-83	4,111,866	259,211	90,552	162,659	3.16	100,651	+2,008	+0.05
	1883-84	5,414,257	312,007	98,963	213,114	3.93	211,358	+1,756	+0.03
Madras - - -	1882-83	3,721,233	335,671	78,411	257,260	6.91	111,616	+145,644	+3.91
	1883-84	3,809,038	352,337	90,368	261,970	6.74	152,286	+109,693	+2.81
Bombay - - -	1882-83	1,538,971	57,874	24,128	33,746	2.19	60,874	-26,628	-1.73
	1883-84	1,602,399	67,115	24,227	42,888	3.02	62,827	-10,939	-1.24
Stores and Reserves	1882-83	89	-	-	-	-	4	4	-4.50
	1883-84	80	-	-	-	-	4	4	-4.50
GRAND TOTAL, India - - -	1882-83	20,700,856	1,400,063	501,936	898,127	4.32	784,168	+113,939	+0.55
	1883-84	21,499,332	1,470,707	514,837	955,870	4.44	845,324	+110,546	+0.41

Irrigation, navigation (including also agricultural works), which are classed as other than productive, are divided into imperial, provincial, and local. The greater part of the expenditure is provincial in the North-West Provinces and Burma, while in Bombay it is entirely, and in the Punjab and Madras largely, imperial. The following tables give the expenditure and receipts for the last two years:—

TOTAL

TOTAL EXPENDITURE and RECEIPTS ON IRRIGATION, NAVIGATION, and AGRICULTURAL WORKS other than "PRODUCTIVE" for 1882-83 and 1883-84.

EXPENDITURE.

		Imperial.	Provincial.	Local.	TOTAL.
		£.	£.	£.	£.
Irrigation and Navigation	1882-83	353,876	343,288	1,126	698,290
	1883-84	382,688	182,286	424	—
Agricultural	1882-83	134,702	47,816	307	202,825
	1883-84	132,764	45,512	2,197	—
GRAND TOTAL - - £.	1882-83	507,578	391,104	1,433	901,115
	1883-84	515,452	232,831	2,621	750,904

RECEIPTS.

		Imperial.	Provincial.	Local.	TOTAL.
		£.	£.	£.	£.
Irrigation and Navigation	1882-83	23,941	110,575	2,605	137,181
	1883-84	29,480	107,476	3,088	140,044
Agricultural	1882-83	1,445	431	-	1,828
	1883-84	1,406	422	-	1,876
GRAND TOTAL - - £.	1882-83	24,266	111,006	2,665	139,057
	1883-84	30,886	107,698	3,088	141,872

Finally, there is the expenditure on protective irrigation works. During 1883-84 a sum of 283,217 l. from the Special Famine Relief Fund was devoted to this object, and in addition the amount of 777,082 l. was transferred from "ordinary" to "protective" expenditure, making the total expenditure on protective irrigation 1,060,299 l. as against 1,164,260 l. in the previous year.

In treating the irrigation systems of the various provinces no distinction need be made between the imperial, provincial, and local divisions, which are really financial. Irrigation according to Provinces

In Madras the number of "productive" irrigation works was increased from seven to eight by the inclusion of the Barur tank in this class. The Kistna Delta works irrigated 37,039 acres more than in 1882-83, while the Penner and Sangam systems both irrigated rather less. The total outlay on "productive" irrigation came to 174,156 l. On other than productive works there was an expenditure of 158,276 l. In addition to these sums, an annual grant is made for protective irrigation, part of which is devoted to the Buckingham Salt-water Navigation Canal, which runs north from Madras. A protective irrigation scheme is under consideration for Salem. Madras.

No new works were undertaken in the Bombay Presidency, and the area irrigated was less by some 4,000 acres. For crops, however, which depend on irrigation alone the area increased. It is said that the progress of irrigation works was considerably hindered by the demand for skilled labour on the numerous railways in progress. A general reduction of the water-rates came into operation this year, and the receipts under this head declined from 16,324 l. to 14,404 l. Hopes, however, are entertained that this reduction will tend to increased irrigation and consequently to larger receipts. Bombay.

The year's operations in the Orissa circle do not seem to have been very satisfactory. The area actually irrigated, 48,760 acres, was less by 84,628 acres than Bengal.

**IRRIGATION.** than in the preceding year. Moreover, a great number of the five-year leases were not renewed. Under these circumstances a Commission was appointed to inquire into the whole subject. In the south-western circle more progress was made. The Orissa Coast Canal was pushed on, and is now nearly dug out to full section, while the works on the Eden Canal were completed as far as hitherto sanctioned. Both irrigation and traffic increased considerably. In the Sone circle also a larger area was leased for irrigation, but owing to remissions and a decrease in water-rates the net receipts fell off.

**N. W. Provinces and Oudh.** The irrigated area, 2,297,647 acres, in the North-West Provinces was the largest on record, and exceeded that of 1882-83 by 86,337 acres. The increase on the Agra Canal was especially satisfactory, as it occurred when the Jumna was unusually low, and some apprehensions had been formed that the canal supply would run short, especially as the distributary system had been extended in the previous year. The expenditure on the Betwa Canal from the famine relief grant was within the allotted sum.

**Punjab.** Except for the Swat River Canal, which is protective, the canals in the Punjab are either perennial or inundation canals. The area irrigated from the former class was very satisfactory; but owing to the late rise of the rivers that area served from the inundation canals decreased. Three new canals of this description are now under construction; on two of them operations were impeded by floods.

**COMMUNICATIONS, BUILDINGS, &c.** The total expenditure on military works, and on civil buildings, roads, and other services was, respectively, 1,018,128 £. and 4,777,444 £., against 964,307 £. and 4,350,314 £. in 1882-83.

**Bengal.** The building of an office for the Controller of Military Accounts in Calcutta was completed during the year, and several important public buildings were advanced. Two new first class jails at Gya and Durbhunga were also almost finished, and the judicial courts at Pubna, Mymensingh, and Furreedpore were under construction. As regards communications, nine roads were completed as feeders to stations on the Northern Bengal State Railway, and considerable improvements were carried out at the rising port of Narainganj.

**Assam.** The total expenditure of the Public Works Department in Assam came to 222,548 £.; out of this 20,663 £. was devoted to imperial military works, including a road to Kohima. In the Naga Hills both civil and military roads were undertaken. A portion of the expenditure in Assam is absorbed by the maintenance of the provincial fleet.

**N. W. Provinces and Oudh.** A sum of 601,828 £. was spent on communications and buildings in the North-West Provinces, against 504,713 £. in the previous year. The district boards are reported to have taken a very useful share in initiating new works. No single undertaking of great importance was begun, and the expenditure for military purposes was insignificant. But the internal communications of the several districts are gradually being systematized.

**Punjab.** In spite of some progress in late years the state of communications in the Punjab, both with reference to political and commercial requirements, remains very backward, and demands a larger outlay than is at present possible. The total expenditure on these objects in 1883-84 was 741,053 £. Under the head of military works a new outpost was begun at Mamdani, in the Dera Ghazi Khan district; at Dera Ismail Khan the lines of a field battery were converted into lines for a mountain battery; a new hospital was finished. As regards communications, the most important work done was the diversion of the Grand Trunk Road necessitated by the new bridge over the Indus at Attock.

**Central Provinces.** As the country is opened up by the railways the demand for communications becomes more pressing every year, and several of the old roads have partly given way owing to the increase in heavy traffic. A good deal was done in 1884, and the important Jubbulpore and Mandla road, which has cost nearly 60,000 £., was opened. The total sum spent on public works was 142,485 £. About 24,000 £. was assigned to military works, the barracks and stables at Kamptee being improved, and the fort at Sitabaldi remodelled.

**Burma.** The total outlay on public works in Burma came to 444,516 £., or 70,000 £. less than in the previous year. The largest single item of this, 200,000 £., was expended upon roads. Feeder roads were constructed in connection with the railway from Prome to Rangoon, and also with the line from Rangoon to Toungoo. Embankments accounted for over 25,000 £. (that at Maribin being completed), and water communications for another 22,000 £. Expenditure on military

military works reached 25,070 *l.*; a new station hospital at Rangoon was begun, and a project for arming Monkey Point battery with five 9-inch guns was sanctioned. COMMUNICATIONS,  
BUILDINGS, &c.

The expenditure in the buildings and roads branch of the Public Works Department in Madras amounted to 278,562 *l.* Military works absorbed over 59,000 *l.*; they were chiefly confined to repairs and improvements. The scheme for the repair of the Madras Harbour Works, which were severely damaged by a cyclone in 1881, was still under consideration. This undertaking is classed as among "Productive Public Works," and is constructed out of borrowed money; 22,082 *l.* was spent in maintaining the works in their existing condition, and in guarding against the action of the sea on the north. Attention has also been devoted to the Mangalore Harbour, and to the Cocanada mouth of the Godavari, which has opened and deepened recently. A special toll was enforced to pay for an extension of the works which keep the sand from accumulating at the entrance of the estuary, and notwithstanding its incomplete condition the harbour was used by vessels. Madras.

The amount spent on public works in the Bombay Presidency came to 733,371 *l.*, military requirements taking 107,037 *l.* of this. New lines for native troops were completed at Jacobabad, and also at Steamer Point, Aden, and an ordnance depôt and hospital for British troops was in progress at Ahmadabad; over 330,000 *l.* was spent upon communications, the new roads being principally feeder roads to railways either existing or under construction. Among civil buildings a laboratory for the Elphinstone College was begun, and the Deccan College was enlarged. Bombay.

## X.

## POST OFFICE AND TELEGRAPHS.

POST OFFICE  
DEPARTMENT.

THE Post Office proper is a department of the Government of India, locally organised into 14 circles, which are generally co-extensive with the Provinces. The charges and some of the receipts of the district post are also placed under the same trading in the Finance Accounts, and the district post is coming every year to be more largely administered by the officials of the Department.

## The District Post.

The district post is usually supported by a local cess levied with the land revenue, or, as in Madras and Bombay, by a grant from the provincial revenues. The total receipts of the district post in 1883-84 were 104,582 *l.*, against 104,078 *l.* in 1882-83, and the total expenditure was 96,071 *l.* against 92,053 *l.* The number of district post offices open was 842, or 52 more than the previous year, and the length of district postal lines was 34,349, or nearly 1,000 miles more.

## Post Office.

The Post Office has not yet attained the position of a self-supporting institution, though approaching it more nearly every year. The following table will give a statement of total receipts and charges for the last two years. It is taken from the Finance Accounts, and includes the usual items on account of the district post:—

	Net Receipts.	Expenditure.	Net Loss.
	£.	£.	£.
1882-83 - - - -	977,797	1,194,010	216,213
1883-84 - - - -	1,016,743	1,234,481	115,738

The most important extension of post office work during the year was the introduction of the scheme for utilising post offices for telegraph work, by which every post office in India was constituted a receiving office for telegrams. From these offices, again, telegrams are despatched without extra charge to the nearest telegraph station. The new arrangement was in operation for four months of the year under review, and its working so far has been pronounced successful. A money order exchange was also established with France, and reply post-cards were introduced from the 1st February 1884. Considerable progress was also made in all the ordinary branches of administration, while the non-postal lines, as they are called, for which the department is responsible, were further reduced. On these lines the vehicles are used equally for the conveyance of passengers and parcels as of the mails. The Government bullock train between Lahore and Ludhiana, *via* Ferozepore, was closed on the opening of the railway from Raiwind to Gandasingwala. The following statement will give a comparative view of the operations of the Post Office for the last three years:—

YEAR.	Post Offices.	Letter Boxes.	Village Postmen.	Length of Postal Lines.	Articles passing through the Post, including Money Orders.
	No.	No.	No.	Miles.	No.
1881-82 - - -	4,819	7,190	3,241	59,677	171,804,000
1882-83 - - -	5,310	7,936	3,670	61,204	186,620,000
1883-84 - - -	5,879	8,426	3,843	63,536	203,340,000

With

With regard to the articles passing through the post, the increase in the number of post-cards is very remarkable. They are chiefly used by the native community; introduced as recently as July 1879, their number last year was over 29 millions, and this year exceeded 38 millions. POST OFFICE DEPARTMENT.

Inland; money orders were also undertaken for the first time in 1879. Their popularity is growing very fast. In 1882-83 the number issued was slightly over two and-a-half millions, their value was nearly six millions and-a-half in sterling, and the commission on them amounted to over 77,000 £. In the year under review the number was over three millions, the value exceeded seven millions, and the commission came to nearly 85,000 £. Foreign money orders are divided into two classes, those expressed in sterling, and those expressed in Indian currency. Both classes show a steady increase. The value of the orders issued by India on the United Kingdom, expressed in sterling, was 116,118 £, against 109,832 £. in the previous year. Postal notes have also been introduced, but the public as yet has been slow to take advantage of them. Money Orders.

This was the second year in which Post Office Savings Banks have been at work, and a good deal was done in extending their operations, though the facilities afforded for thrift are far from being generally appreciated yet. The total number of accounts during the year was 84,848, or an increase of more than 35,000; only 8,410 of these were European or Eurasian. The balance of deposits at the close of the year aggregated 751,445 £. Post Office Savings Banks.

The following table will show that the telegraph system made important progress during the year :— TELEGRAPH.

	Line Miles.	Wire Miles.	TOTAL.
1882-83 . . . . .	21,740	62,960	84,700
1883-84 . . . . .	23,207	69,669	91,876

At the same time. the scheme for combined action between the Postal and Telegraph Departments, which has been mentioned above, was satisfactorily started; viewed financially, however, there was a serious decline in the net receipts of the Department, which fell from 81,779 £. to 38,007 £. The reduction was partly due to an actual decrease in the message revenue, but also to an increase in working expenses slightly out of proportion to the increase in mileage of lines and wires. Abnormally heavy charges were incurred in reconstructing some of the older lines, and the receipt from some of the newly-opened ones are likely to expand. Nor does the Government of India regard the decrease in the revenue with dissatisfaction, as its policy in developing the telegraph system is to subordinate questions of remunerativeness to the public interest. Moreover, the receipts of 1882-83 were unusually swollen in consequence of the military operations in Afghanistan, while this year the falling off in the value of messages was entirely due to the smaller number and value of State messages. A temporary line of telegraph was opened for the first time between Burma and Siam, but owing to the wild and unhealthy character of the country it was found impossible to maintain it open during the winter. It has since, however, been re-established and is now in working order. The telephone companies are winning a fair amount of support in Calcutta, Bombay, Madras, Rangoon, and Kurrachee. The number of exchange connections increased from 244 to 411, and 11,986 £. were realised, against 7,300 £. in the previous year. The royalty payable by the companies to Government has also been reduced one-half.

## XI.

## MINES AND MANUFACTORIES.

MINERAL  
RESOURCES.  
Collieries.

THE use of Bengal coal, which is general in that province for industrial purposes, is gradually extending throughout Northern India. Bombay still continues to draw its supply from England; the freights for English coal sent out in exchange for cargoes of raw produce ruling very low. But with the extension of railways and the reduction of freights in the coasting trade Indian coal may before long compete successfully with imported coal even in the Western Presidency. In Bengal only three out of the numerous coal-fields known are actually worked, the principal of which is the Raniganj. There are 78 collieries, and the total out-put was 1,200,957 tons, or more than double the out-put, 532,846 tons, of 1882-83. Outside Bengal there are only two collieries, those of Mohpani and Warora, in the Central Provinces, though it is stated that workings were begun in the Native State of Rewah towards the close of the official year. An attempt to open a mine at Lakading in Assam has also recently failed. The Assam coal-fields, however, which have just been prospected, are considered very promising. They cover a plateau with an area of 30 square miles. The number of people engaged in mining in India is something over 23,000, but the return is admittedly inaccurate.

## Mineral Oils.

The earth-oil industry in Burma does not fulfil the sanguine expectations that were at one time formed of it. The largest operations have been undertaken by the Boronga Company on the Boronga islands of Akyab, and on the Ramree island of the Kyookpyoo district. Last year the company sank eight new wells, but the whole amount of crude oil pumped up was only 234,000 gallons, and their refined oil was selling at 9 s. per case in Kyookpyoo, while American petroleum was quoted at 10 s. 6 d. a case in Calcutta. Two other companies also started during the year; one was fairly successful; the holes bored by the other all turned dry. In fact, no oil-bearing strata has yet been discovered in Burma equal to the American or Caspian fields, and the natives appear to work what there are more profitably than Europeans. In Assam the Assam Railways and Trading Company have a concession for working the oil-bed at Makum; but as yet they have taken no advantage of it.

## Gold.

In Madras the gold-mining enterprise in the Wynaad has almost entirely collapsed, though two mines were worked on the Nilgiri plateau with encouraging results. The interesting case as to the right of the State to subjacent minerals in the Ryotwari lands of that Presidency was finally settled to the effect that such right belongs to the holder of the land, who is liable to a special assessment in the event of minerals being quarried.

## Iron.

Iron has been found in almost every district in India, and is worked with charcoal by native agency. It is expected that the growing scarcity of fuel and the competition of English iron will displace the indigenous methods by European manufacture on a large scale. This has not yet occurred. The chief native foundries are in Bengal, the Punjab and the Central Provinces.

## MANUFACTORIES.

## Cotton.

The cotton industry of India is rapidly developing. There were 74 mills at work in 1883-84, against 62 in the previous year, 56 of these being in the Bombay Presidency, and additional spindles have also been set at work in many of the older mills.

The following table will give an idea of the progress of the cotton mills:—



COTTON MILLS worked by Steam.

MINES AND MANUFACTORIES.

	Number of Mills.	Number of Looms.	Number of Spindles.	Average Daily Number of Hands Employed.
1879-80	68	13,307	1,470,880	39,537
1882-83	62	14,386	1,550,041	53,231
1883-84	74	16,251	1,805,284	61,386

These mills consumed about 168 million pounds of cotton during the year, and the capital invested in them is estimated at 10 millions sterling. The value of their total outturn exported to foreign countries amounted to 2,853,171 l.; five years ago it was 1,621,746 l., so that it has risen 56 per cent. in the interval. China and Japan are the largest markets for twist and yarn; Zanzibar and Arabia take most of the piece goods. An interesting monograph on cotton manufacture in the Punjab was drawn up this year, under the orders of the local government, and throws much light on the economic and industrial condition of the people. Taking the total annual cotton yield of the Punjab at 1,011,815 maunds, it appears that about 84 per cent. of this is consumed locally. It is manufactured by indigenous looms for native wear. The manufacture is as a rule conducted in all its stages by single operatives working at home; there is only one establishment in the province which is said to employ 20 hands. In addition, Indian piece goods are imported into the Punjab from Bombay and the North-Western Provinces. But the exports, which average something like 140,000 maunds a year, far exceed the imports, and two-thirds of this are said to be of Punjab manufacture. Most of the exports go to Rajputana; a good deal of cloth also finds its way up the passes into Kashmir, and still more is taken by Afghanistan. Deducting exports of local manufacture the total quantity of native cloth retained in the Punjab is estimated at 670,000 maunds, representing a value of 2,225,000 l. Yet this by no means suffices for the wants of the population. During the last four years an average of 353,711 maunds of European piece goods, worth 3,006,543 l., has been consumed by the Punjabis. The amount, however, does not show any tendency to a rapid increase, or even to an increase proportionate to the larger purchasing powers of the people, a fact which, in connection with other considerations, points to the native weaver holding his own against our competition of English manufacture. This is especially the case in the cheaper and coarser goods. As according to these figures the average expenditure per head of the population on cotton fabrics must be about 5 s. 6 d., the general prosperity of the Punjab seems to maintain a high standard. The first Act regulating the employment of labour in the Indian cotton mills was the Factories Act of 1881. It has only been extended as yet to Bombay and the Central Provinces. Fourteen minor breaches of the law were detected in Bombay during the year, and in a mill at Nadiad serious irregularities were discovered which led to the manager being twice fined.

Just as cotton-spinning centres round Bombay, so do the jute mills round Jute. Calcutta, only one small concern each working in Madras and Bombay.

The present position of this industry is given below.

	Number of Mills.	Number of Looms.	Number of Spindles.	Average Daily Number of Hands Employed.
1870-80	22	4,046	70,840	27,404
1882-83	20	5,633	95,937	42,797
1883-84	21	6,139	112,650	47,868

MINES AND  
MANUFACTORIES.

The capital invested in these mills is computed at between 2,600,000 *l.* and 2,700,000 *l.* The whole value of the export trade in jute goods of all kinds for 1883-84 is returned at 1,334,145 *l.* The number of bags exported was 63,645,984, or more by nearly 3,000,000 than in the preceding year, but their value was less by 170,000 *l.* The mills, in fact, have not been doing a prosperous business lately, for though trade is expanding there has not only been a reduction in the price of bags, but an increase in the price of raw jute. The United States take the vast majority of the mill-made "gunny bags," Hong Kong, which is nominally the next largest purchaser, passing most of the goods shipped there on to North America.

## Indigo.

There are no statistics as to the exact number of <sup>50</sup> factories in India, although it is known to be very great. Most of them are very small, and are owned and worked by natives on the joint-stock principle with limited liability. The industry is chiefly confined to Bengal and the North-West Provinces, though it also flourishes in Madras. Last year the trade was very active, and the quantity exported, 168,590 cwt., was nearly 20 per cent. greater than in 1882-83, while the value, 4,640,990 *l.*, was nearly 19 per cent. higher.

## BREWERIES.

A large development of brewing in India is expected in the immediate future, though the hops still have to be imported, as the cultivation of the plant in Kashmir and the Punjab has not yet passed beyond the experimental stage. The purchases of the Bengal Commissariat Department during the year under review amounted to 1,936,221 gallons, against 1,699,914 in 1882. The brewers have since obtained a contract for the supply of practically the whole of the troops in Northern India, and new breweries have been started at Lucknow, Darjeeling, and Poona. Seven more breweries were working in 1883-84, bringing the number up to 24, and the outturn was estimated at 2,597,298 gallons. Eight of these were in the North-West Provinces, and six in the Punjab.

## Other Industries.

Among other large industries may be mentioned 44 rice mills, 43 of which are in Burma, 40 timber mills, 32 of which are in the same province, seven sugar mills, 17 lac factories in the North-West Provinces, and Messrs. Burn's extensive potteries at Raniganj in Bengal. ✓

XII.

T R A D E.

THE trade of India may be considered under three heads (1) Foreign sea-borne trade; (2) Frontier land trade; (3) Coasting trade. Statistics are only complete for the foreign sea-borne trade.

The foreign trade of India mainly consists of the export of agricultural produce and the import of cotton manufactures, metals and treasures. Except for an export duty of 6 *d.* per cwt. on rice, and the customs tariff on five imported articles, the trade of British India is now entirely free. Between the years 1862-63 and 1872-73 the foreign trade increased 1 per cent. In the next 10 years, concurrently with the development of traffic through the Suez Canal, it has advanced 61 per cent. The following table gives a comparative statement of the total private and Government trade for the last four years, and also shows the percentage of it which passed through the canal.

FOREIGN TRADE.

	1880-81.	1881-82.	1882-83.	1883-84.
<b>PRIVATE IMPORTS:</b>	£.	£.	£.	£.
Merchandise - - - - -	50,308,834	46,992,064	50,003,041	52,703,233
Treasure - - - - -	8,988,214	11,322,781	13,453,157	12,877,963
<b>TOTAL - - - £.</b>	<b>59,297,048</b>	<b>58,314,865</b>	<b>63,456,198</b>	<b>65,581,196</b>
<b>PRIVATE EXPORTS:</b>				
Merchandise - - - - -	74,531,282	81,901,960	83,400,865	88,035,139
Treasure - - - - -	1,409,403	1,097,387	940,859	979,759
<b>TOTAL - - - £.</b>	<b>75,940,685</b>	<b>82,999,347</b>	<b>84,341,724</b>	<b>89,014,898</b>
<b>TOTAL PRIVATE TRADE - - - £.</b>	<b>135,237,733</b>	<b>141,314,212</b>	<b>147,837,922</b>	<b>154,596,094</b>
<b>Excess Exports of Merchandise - - -</b>	<b>24,222,448</b>	<b>34,909,876</b>	<b>33,407,824</b>	<b>35,331,906</b>
<b>Excess Imports of Treasure - - -</b>	<b>7,578,611</b>	<b>10,225,304</b>	<b>12,472,298</b>	<b>11,898,204</b>
<b>GOVERNMENT TRANSACTIONS:</b>				
Imports (no Treasure) - - - - -	2,807,936	2,121,290	2,092,870	2,575,457
Exports { Stores - - - - -	49,320	66,491	84,258	54,974
{ Treasure - - - - -	31,037	2,360	61,200	28,735
<b>TOTAL - - - £.</b>	<b>2,888,293</b>	<b>2,200,141</b>	<b>2,238,158</b>	<b>2,659,166</b>
<b>Percentage of Trade through Suez Canal -</b>	<b>58.79</b>	<b>61.39</b>	<b>62.25</b>	<b>65.8</b>

These figures indicate that the rate of increase in the foreign trade was more than maintained in 1883-84. The total aggregate exceeded that of the previous year by 4.57 per cent., the value of the imports being 3.35 per cent. more, and the value of the exports 5.49 per cent. more. The excess of exports of merchandise over imports, which is a signal feature of Indian trade, was the largest that has yet been reached. Treasure imports showed a slight decrease, but this occurred entirely under the head of silver. The importation of gold, which has progressively increased since 1878-79, rose again from 4,930,871 *l.* to 5,463,315 *l.* More than four-fifths of this were received from Australia (1,920,633 *l.*);

## 60 STATEMENT EXHIBITING THE MORAL AND MATERIAL

## FOREIGN TRADE.

(1,920,633 l.); China (1,360,530 l.); and the United Kingdom (1,328,461 l.). The last-named country also supplied five-sixths of the silver imported. The import of Government stores largely increased. Railway material accounts for half the total amount, but paper, boots and shoes, woollen goods, malt liquors, and other articles which might well be made in India, also exhibited an increase. The United Kingdom virtually holds a monopoly of Government stores imported. Only 75,000 l. worth out of a total value of 2,575,457 l. were drawn from other countries. The increase in the proportion of trade carried through the Suez Canal is more continuous as regards exports than imports. But the United States are the only country, west of the Isthmus of Suez, the bulk of whose trade with India does not pass through the canal.

## Shipping.

The total number of vessels which entered and cleared at Indian ports from and to foreign countries was 11,662 against 11,715 in 1882-83. But, though the number of vessels declined, the aggregate tonnage rose from 7,071,884 tons to 7,250,603 tons, and the average tonnage from 604 to 622 tons. The explanation is, that the process of substituting steam for sailing vessels, and of replacing small vessels by large ships, is going on rapidly. The number of vessels entering in ballast also rose again, while about half as many as before, viz., 33, left without cargoes. The increase in vessels entering in ballast is largely due to the extension of the wheat and seeds trade. The percentage of the steam tonnage passing through the canal to the total steam tonnage reached 69, or 6 per cent. more than last year. The tonnage employed in the trade within the United Kingdom has declined from 46 per cent. in 1880-81 to 41 per cent. Out of the total number of vessels engaged in the whole foreign trade of India, 4,196 were classed as British, and 2,601 as British Indian. The average tonnage of the former was 1,327, and of the latter 134, tons. The total number of foreign vessels was 1,701, representing 16.02 per cent. of the aggregate tonnage.

The imported merchandise was shared among the maritime provinces as follows:—

		1882-83.	1883-84.
<b>Bengal:</b>		£.	
Imports	- - - - -	21,120,141	22,400,034
Exports	- - - - -	34,145,874	36,102,205
<b>TOTAL - - - £.</b>		<b>55,265,515</b>	<b>58,503,139</b>
<b>Bombay:</b>			
Imports	- - - - -	19,389,631	20,760,270
Exports	- - - - -	31,363,568	32,512,095
<b>TOTAL - - - £.</b>		<b>50,753,199</b>	<b>53,272,365</b>
<b>Madrás:</b>			
Imports	- - - - -	4,583,367	4,386,770
Exports	- - - - -	8,239,624	9,146,860
<b>TOTAL - - - £.</b>		<b>12,822,991</b>	<b>13,533,630</b>
<b>British Burma:</b>			
Imports	- - - - -	3,723,043	4,386,770
Exports	- - - - -	7,082,613	6,573,438
<b>TOTAL - - - £.</b>		<b>10,755,656</b>	<b>10,960,208</b>
<b>Sindh:</b>			
Imports	- - - - -	1,186,655	1,347,758
Exports	- - - - -	2,619,533	3,700,539
<b>TOTAL - - - £.</b>		<b>3,806,538</b>	<b>5,048,297</b>

Exports

Exports of produce exhibit a marked increase from every Province except Burma, where the amount of rice shipped sensibly declined, chiefly owing to damage done to the crop by storms. But the most notable feature of this year is the progress of Sindh. Her exports increased more than 41 per cent., owing to the great demand for wheat and seeds. Now the railway has been completed Karachi bids fair to become the principal outlet for Punjab wheat. The increase in exports naturally implied a larger number of vessels in the port, and an increase in imports.

In the next table the proportions of the total foreign trade taken by the 11 principal countries which have commercial relations with India will be compared. It will be seen that the gradual progress whereby the United Kingdom is being displaced in favour of the nations round the Mediterranean basin, and also of Belgium, was checked this year.

	1882-83.		1883-84.	
	Total Imports and Exports.	Percentage to Total Trade.	Total Imports and Exports.	Percentage to Total Trade.
	£.		£.	
1. United Kingdom - - - -	81,770,106	53.31	86,695,594	56.08
2. China - - - - -	17,684,971	11.06	17,248,977	11.16
3. France - - - - -	7,757,816	5.25	9,226,986	5.97
4. Straits Settlements - - -	5,330,570	3.61	4,798,192	3.1
5. Italy - - - - -	5,409,804	3.66	4,321,563	2.8
6. Egypt - - - - -	2,405,501	1.63	3,993,622	2.58
7. United States - - - - -	4,277,560	2.89	3,631,795	2.35
8. Belgium - - - - -	2,230,161	1.51	3,579,588	2.32
9. Australia - - - - -	2,991,192	2.02	3,074,759	1.99
10. Austria - - - - -	3,217,104	2.13	2,839,342	1.87
11. Ceylon - - - - -	2,739,188	1.85	2,644,824	1.71

Between them these 11 countries take 92 per cent. of the whole foreign trade of India. As regards their relative importance, the Straits Settlements and Italy have changed places this year, as also have Australia and Austria. Belgium stands eighth instead of tenth; its trade with India took an enormous stride during the year, advancing no less than 60½ per cent. Antwerp is probably destined to become a chief commercial centre for Northern Europe, for the industrial activity of Belgium can supply many articles which are in constant demand in India, while at the same time a reciprocal demand may be expected from Belgium for raw material. Indian trade with France is steadily increasing, though the demand for Indian wheat has again fallen off. But the rate at which trade between India and the United Kingdom increased during the year, namely, 6.02 per cent., a rate in excess of the rate of increase, 4.57 per cent., of the whole trade of India, was most remarkable. The merchandise imported represented a value of 42,925,183 £. In spite of the growing tendency to take Indian goods direct to the consuming countries, without making England their distributor, it is clear that as long as three-fifths of the Indian imports consist, as they do at present, of cotton and woollen piece-goods, metal, machinery, &c., the United Kingdom will maintain its predominant position.

The next statement contrasts the total value of imports and exports for the last two years, under the principal trade into which they are divided. A new classification was adopted by the Indian Government last year in accordance with the English and French Trade Returns

FOREIGN TRADE.

	IMPORTS.		EXPORTS.	
	1882-83.	1883-84.	1882-83.	1883-84.
	£.	£.	£.	£.
I. Animals - - - - -	190,392	207,561	89,982	127,863
II. Articles of Food and Drink - - - - -	5,145,067	5,381,082	21,465,328	24,812,291
III. Raw Materials and Unmanufactured Articles	3,038,738	3,088,674	34,557,031	34,941,178
IV. Oils - - - - -	1,050,396	654,227	416,276	495,976
V. Articles Manufactured and partly Manufactured:				
(a.) Yarns and Textile Fabrics - - - - -	26,965,980	27,082,986	24,069,535	24,628,432
(b.) Metals and Manufactures of Metals	6,407,777	5,389,429	—	—
(c.) Machinery and Millwork - - - - -	1,342,398	1,788,868	—	—
(d.) Apparel - - - - -	862,601	973,311	—	—
(e.) Chemicals, &c. - - - - -	837,825	876,988	—	—
(f.) Other Manufactured Articles - - - - -	5,171,374	6,058,768	—	—
TOTAL of V. - - - - £.	40,577,956	48,370,847	—	—
GRAND TOTAL - - - - £.	50,003,040	52,703,232	30,598,155	35,008,739

The value of the imports under the second head amounted to 10 per cent. of the gross total of the year. The important items of coal and raw silk are comprised under the second head. This, however, only contributes 5·8 per cent. of the total; it is the fifth head which is by far the most important. Articles manufactured and partly manufactured account for 82 per cent. of the whole import trade. Cotton twist and cotton goods, again, take 58 per cent. of this, while they also represent 47·6 per cent. of the entire imports of merchandise into India.

Imports.

Importations of horses have largely increased during the last few years. The greater number of them come from Australia, and the gradual substitution of steam transport for sailing vessels is at once developing and regulating the trade. Western India chiefly derives its horses from the shores of the Persian Gulf. Under the second head it is noticeable that the importation of beer has shown very little tendency to increase during the last five years; on the other hand the same five years are marked by an increase of over a million gallons in the beer brewed in India. Brewing operations, especially in the north of India, are being widely extended; but India remains practically dependent on other countries for her hops. The imports of salt rose at the rate of 13·3 per cent. As before, the bulk of the salt came from Cheshire, 302,752 out of a total of 383,089 tons. Coal is the most important of the raw material taken by India; 708,358 tons of coal, coke, and patent fuel were imported last year, or more than in 1882-83 by nearly 70,000 tons. Half-a-million tons of this went to Bombay. In Bengal, Ranigunj coal is now used for most industrial purposes, and Indian coal will probably tend to displace English at Bombay as freights become lower. Silk is mostly derived from China, and worked up in the Bombay mills; the trade is very fluctuating, but increased by one-third in the year under review. The following figures will give an idea of the recent history and value of the cotton imports:—

	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.
	£.	£.	£.	£.	£.
Cotton Twist and Yarn - - - - -	2,745,306	3,699,176	3,222,064	3,378,190	3,465,942
Cotton Manufactures - - - - -	16,915,511	22,910,716	20,772,098	21,431,872	21,642,387

The

The lower qualities of imported twist are gradually being displaced by Indian-made twist. The import of manufactured goods shows a very small advance—the value only increased by 1 per cent. It is said that the supply from Manchester has permanently overtaken the demand of the Indian consumer. At the same time, the competition of piece-goods turned out from the Indian mills is increasing. The iron trade, on the contrary, exhibits a rapid progress; over 3½ million cwt. were imported last year, against rather less than 2½ million in 1880-81. Prices were very low, and railway development in India quickened the demand. The imports of galvanised iron, which is extensively coming into use for roofing, has doubled in the last two years. The same progress is noticeable in the imports of machinery and millwork, and witnesses significantly to the industrial advance of India. The value of the imports last year was 1,788,868 £., against 1,342,398 £. in 1882-83, and 616,832 £. in 1879-80.

The quantity of coffee exported was smaller than last year, owing to the low prices and the increase of production in other countries. Of nearly 27 million cwt. of rice which was exported this year, 16½ was sent to England and the Continent. It appears that there has been an enormous increase of late years in its use for distillation throughout Europe.

The exportation of wheat was the largest ever known. During the first three months of the official year the exports were phenomenal, and amounted to half the whole quantity during the previous year. As the season went on the principal conditions which make the Indian wheat trade profitable disappeared. Harvests were abundant in Europe and the United States, and the price of wheat in England was lower than it had been for 100 years. It is stated to be doubtful whether Indian wheat can leave a profit if it is sold in England for less than 40 s. a quarter. In the first three months of 1884 prices ranged from 39 s. to 37 s. Exports consequently fell off, and the total quantity of wheat shipped from India reached a million tons instead of the million and-a-half promised by the rate of exportation at the beginning of 1883-84. Of this amount rather more than half-a-million tons were sent direct to England; France and Belgium being the next largest consumers. The extraordinarily fluctuating character of the trade may be gathered from the following comparison of the exports, and of their value, for the last five years:—

1879-80.	1880-81.	1881-82.	1882-83.	1883-84.
<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>	<i>Tons.</i>
109,777	372,218	993,176	707,220	1,047,824
£.	£.	£.	£.	£.
1,121,014	3,277,941	8,604,081	6,068,934	8,877,561

The sugar trade is rapidly rising in importance. The total exports, 1,426,827 cwt. of unrefined, and 203,693 cwt. of refined, sugar, exceeded those of 1881-82 by 77 per cent. In that year the 5 per cent. duty on imported sugar was taken off, in spite of opposition from the mercantile community in Calcutta. The exports of tea were close on 60,000,000 pounds, but compared with previous years the increase was insignificant. Less than 700,000 lbs. of this are sent elsewhere than to London. The trade with Australia, which promised well, has collapsed temporarily, chiefly owing to the reckless way in which it was pushed. Cotton is the most valuable of the raw materials exported by India, and last year came to nearly 17 per cent. of the value of the whole export trade. The United Kingdom took nearly 2,700,000 cwt., out of a total of 5,973,494 cwt. The season was unfavourable in every way to jute, and the value of the exports declined 32 per cent. The trade in oils, which fell off during the two previous years, somewhat recovered. The value of the exports came to 495,976 £. Castor oil contributes three-fourths of the total trade alone. Under the fifth head the exports of cotton twist and yarn have nearly doubled in the last five years, while the export of piece-goods has more than doubled in the same time. The whole value of the outturn of the Indian mills exported to

foreign countries was 2,853,171 *l.*, against 1,621,746 *l.* five years ago. The largest market for twist and yarn is found in China and Japan. Piece-goods are chiefly taken by Arabia and Eastern Africa.

FRONTIER LAND  
TRADE.

The returns of the frontier land trade of India are admittedly imperfect. Roughly speaking, during the last six years imports into India have remained stationary, and exports have increased about 18 per cent. The total registered trade this year was valued at 10,769,585 *l.*; about equally divided between imports and exports. The trade with Biluchistan, Afghanistan, Kashmir, Nepaul, and Upper Burma is the most valuable, and affords the most considerable prospects. A good deal is expected from Tibet, if free commercial intercourse is established with that country. The possibility of opening a tradeway from North-Eastern Assam into South-Western China is, however, more attractive. The trade between Punjab and Central Asia declined during the year, and is not unlikely to decline more in future. For the extension of the Russian dominion in Central Asia brings with it the imposition of differential or prohibitory duties on Anglo-Indian goods, with the object of favouring Russian manufactures.

Burma.

Both the import and export trade with Upper Burma increased during the year, in spite of the complaints of disturbances in Upper Burma, and the immigrations into British territory.

COASTING TRADE.

The coasting trade of India consists partly of the interchange of native produce for local consumption, partly of the collection of native produce for foreign export, and partly of the distribution of foreign imports. The total value of the trade increased 7 per cent. in 1883-84, and is now 12 per cent. greater than it was five years since.

The total value of the export and import trade for the year amounted to 61,240,304 *l.* Of this rather more than 7,000,000 were treasure. Bombay and Sindh between them take over half the whole aggregate of coasting trade. For, though the presidency possesses no navigable rivers, the coast-districts are productive, and are engaged in a busy commerce which centres in Bombay town. This port is the chief distributor by sea of twist, yarn, and piece-goods for the whole of India, while the bulk of the cotton of Western India also finds its way there for foreign shipment or distribution among the local mills. Local-made twist sent to Calcutta has completely displaced English goods in the coarser varieties.

The coasting trade of Bengal comes next in importance. One reason for its inferiority is, that there is a large internal traffic over the navigable rivers of the Gangetic delta which supplies the place of coasting trade. In Madras, again, which takes 14.4 per cent. of the whole coasting trade; the coast is poor, and much of the provincial commerce is carried on by land. Burma, with a population only one-tenth of Madras, has very nearly as large a coasting trade. The number of steamers entered and cleared in the coasting trade during the year was 11,086; of sailing vessels 6,283, and of native crafts 325,519. Steam tonnage is increasing every year, and sailing tonnage declines. Native craft apparently hold their own, and their tonnage has considerably increased. Of the total of over 18,000,000 tons of shipping engaged in the coasting trade, about 68 per cent. was British, exclusive of British Indian and Native.



XIII.

PUBLIC HEALTH AND SANITATION.

The following statement will show the death-rate per 1,000 as regards registered mortality in the different provinces of India from the four principal diseases and from all causes in 1883-84 :—

PROVINCES, &c.	Cholera.	Small-Pox.	Fevers.	Bowel Complaints.	Deaths from all Causes.	
	Rate per 1,000.	Rate per 1,000.	Rate per 1,000.	Rate per 1,000.	Rate per 1,000.	
Bengal excluding Calcutta	1882	2.75	.20	14.06	.92	20.41
	1883	1.36	.14	13.21	.83	18.82
Assam	1882	4.69	.71	13.43	3.14	25.85
	1883	3.29	1.36	14.90	3.9	27.14
North Western Provinces and Oudh	1882	2.02	.60	24.90	2.12	33.07
	1883	0.41	3.14	18.82	1.50	27.57
Punjab	1882-83	0.02	0.34	18.40	0.30	20.79
	1883-84	0.01	0.04	16.25	0.78	25.25
Central Provinces	1882	1.36	0.45	17.31	2.80	20.97
	1883	1.68	0.33	19.86	3.02	34.62
British Burma	1882-83	1.96	0.21	7.40	0.90	16.14
	1883-84	0.60	0.18	7.19	0.76	14.62
Berar	1882-83	1.4	1.	15.	5.1	29.4
	1883-84	10.6	1.5	20.3	7.2	51.3
Madras	1882-83	.6	.8	4.00	4.20	16.2
	1883-84	1.2	1.3	7.1	0.77	18.9
Bombay	1882-83	0.48	0.10	14.80	1.72	20.87
	1883-84	2.31	0.81	16.21	2.14	25.54

The registration of vital statistics makes but slow progress in Bengal. Births were recorded in 46 towns, the results giving a birth-rate of 22.08 per 1,000. The preponderance of male births was very noticeable, their proportion to female births being 117 per cent. This is held to illustrate the theory that there is an excess of male births, where, as in India, the age of the father is on the average much superior to that of the mother. The number of deaths registered in the selected provincial areas fell off, but the figures are too inaccurate to found conclusions upon; they indicate, however, that cholera and fever were less fatal than in the previous year, while small-pox was more virulent. Cholera in an epidemic form, however, spread over the whole of the Terai. The cold season appears from the statistics to be the unhealthiest in Bengal, and infant mortality is always high. The birth-rate in Calcutta was below, and the death-rate above, that recorded in other towns. In the capital itself the number of out-patients treated at the various medical institutions rose from 232,504 to 239,337; in-patients were 20,381, against 20,579. A new dispensary at Burabazar relieved the pressure on the Mayo Hospital. In order to provide sufficient accommodation for Europeans suffering from small-pox, the Shumbunath barrack compound was converted into a paying ward. The total expenditure for the year on the Calcutta hospitals was 40,468 l.; the net cost to Government was 26,231 l. A large number of the mofussil dispensaries were transferred to municipal management, and a new organisation of the medical officers introduced. Municipal bodies managed 102 of the dispensaries open during the year. Indoor patients decreased from 23,468 to 22,468, and out-patients from 934,155 to 915,753. It is said that the people are learning to appreciate European medical science. These figures, however, and the fact that the prevalence of an epidemic makes practically no difference in the resort to dispensaries, hardly bears this out. The total income of the dispensaries was 45,175 l., Government contributing 3,951 l. The number of lunatics admitted to the asylums increased, chiefly among the criminal lunatics; the whole number treated during the year was 1,081. The exemption of certain portions of the town from the Contagious Diseases Act at the beginning of the year led to an immediate increase of disease in the exempted and non-exempted areas.

GENERAL HEALTH AND MEDICAL RELIEF. Bengal.

GENERAL HEALTH  
AND MEDICAL  
RELIEF.

While this was engaging the attention of the local Government, orders were received from the Government of India for the total withdrawal of the Act; the lock-hospitals, however, at Alipore and Sealdah were kept on as voluntary institutions, but practically no use was made of them, and by the end of the year the Calcutta hospitals had treated 2,666 more cases of disease than under the previous arrangement.

## Assam.

The recorded birth-rates and death-rates in Assam are admittedly far from accurate as a rule, and seem to have been more so than usual in 1883-84. The registration-figures only give 24·83 for the birth-rate; the death-rate, which rose from 25·92 to 27·14, perhaps points to greater accuracy, as the year was not an exceptionally unhealthy one. The number of fatal cases of cholera was smaller, though small-pox was quite as severe, and a malignant paludal fever, originating in the low valleys round Goalpura, seems to gain ground. Twenty-nine dispensaries were open during the year, of which 23 were under the local boards; all these are mainly supported out of the local funds. Both the number of in-patients and out-patients increased during the year, the larger number being treated at Sylhet. Assam has only one lunatic asylum, but lunacy appears to be on the increase in the province; the asylum was visited with a severe epidemic of cholera.

N. W. Provinces  
and Oudh.

The vital statistics of the year were unusually favourable, in consequence of a dry autumn, and accompanying decrease of fever. Small-pox, however, was far more severe than before; 138,641 deaths are attributed to this cause, against 26,628. Most of the districts enjoyed comparative immunity from cholera, except Banca, where a violent outbreak occurred. The birth-rate and death-rate per 1,000 are given as 40·84 and 27·57, respectively, but are confessedly inexact. The number of dispensaries opened remained the same, but the number of patients declined owing to the exceptionally healthy character of the year, and not to any dissatisfaction with these institutions. An interesting report was submitted on the pilgrim hospitals of Kumaun and Garwhal supported from old endowments on behalf of the pilgrims; they appear to be very useful. The population of the lunatic asylums grows steadily, especially the criminal lunatics. Additional accommodation is being provided at Agra.

## Punjab.

The general health of the Punjab was even better than that of the North-West Provinces; epidemic cholera was entirely absent, and the death-rates from fever and bowel complaints lower than in any of the preceding five years. The average death-rate is put as low as 25 per mille; the average birth-rate being 39. Till quite recently native opinion has been singularly apathetic with regard to the advantages of hospitals and dispensaries. It is therefore satisfactory to learn that four new dispensaries were opened during the year, and that large subscriptions came in for a new one at Delhi. The total income devoted to institutions affording medical relief was 44,607 l., of which 35,680 l. came from local funds, and 705 l. from the provincial revenues. Six leper asylums were maintained.

Central Pro-  
vinces.

The total population under registration in the Central Provinces was 8,817,185, and the births and deaths recorded gave rates per 1,000 of 40·59 and 34·56. The temperature of the year was unusually high, and the mortality from all the principal diseases increased. There were 82 dispensaries in the provinces, the same number as in the preceding year; but there were nearly 20,000 more out-patients receiving attention. Insanity appears to be on the increase; it is not unfrequently due to the abuse of ganja, an intoxicating preparation of hemp.

## British Burma.

The true birth-rate in British Burma is estimated at something between 40 and 45 per mille. It is probably considerably greater than in India, as the standard of living is higher, and the Burmese marry at a more suitable age for reproduction. The death-rate is set down at from 30 to 35 per mille. It is far largest among the immigrant Hindoo population. Last year appears to have been a normal one; cholera was severe only in a few localities. Half the deaths are put down to fever; this is probably due to very summary classification. The number of hospitals and dispensaries in Burma was 28, and the attendance at them pointed to an increase in their popularity. The lock-hospital at Moulmein was closed during the year in accordance with the wish of the municipal committee.

## Berar.

High temperature and a heavy rainfall brought with them a year of much sickness in the Hyderabad Assigned Districts. Cholera broke out in an epidemic form, and carried off 27,897, whereas only about 3,500 deaths were put

put down to this disease in 1882-83; it was severest in Ellichpur and Baniu. Small-pox in an epidemic form also appeared, preceding the cholera, and again growing stronger as that disease died away. Fever was again very virulent, and the death-rate of the whole province was put down at 51·3, against 29·4 in the previous year, while the birth-rate fell from 42 to 40·3. Five new dispensaries were opened, and a special staff, which was much needed, was detailed for cholera duty. In addition, the police did useful work in distributing cholera medicines.

In spite of an average rainfall and low prices the season was the most unhealthy known in the Madras Presidency since 1878. Almost every head of disease returned an increased mortality, the death-rate among children being especially high. The cholera which invaded Madras towards the end of 1881 was still generally confined to the southern districts, but it steadily extended its area, and before the close of the year gave indications of spreading northwards. The total number of deaths registered from this cause were 36,284. According to the census of 1881 the total native population of the Presidency amounts to 29,883,909. Registration is conducted by the municipal authorities in municipal towns, and elsewhere by the revenue officers. There were 28,503,100 persons under registration during the year, and the birth-rate was returned at 27·7 per mille, the highest rate yet reached, against a death-rate of 19·0 per mille. Medical institutions are either under the surgeon general or the Government, or controlled by the municipal bodies. Both the number of hospitals, dispensaries, &c., and the number of patients treated, 1,696,809, increased. The total income from all sources for providing medical relief came to 80,354 l. Government contributed 28,864 l. of this, and 47,200 l. was derived from the municipal and local funds.

Madras.

The general health of the Western Presidency was also unsatisfactory. Cholera and small-pox in an epidemic form prevailed over wide areas, especially in the Konkan, Deccan, and Gujarat; the mortality per mille from the former disease advancing from 0·41 to 2·31. No special causes are assigned for this severity. Two hundred and two civil hospitals and dispensaries were open at the close of the year, an increase of four. Out of these 43 are maintained from provincial funds and under Government management, 128 are supported from local and municipal funds, and the rest are charitable or aided charitable institutions. The demand for accommodation for lunatics was again urgent, especially for criminal lunatics. The larger proportion of these came from the European soldiery, and the great majority of cases originated in the abuse of spirits or intoxicating drugs. The net increase for medical institutions was 98,177 l. Government contributed the large share of 77,898 l. to this.

Bombay.

VACCINATION.

VACCINATION AND  
SANITATION.

	Total Number of Vaccinations.	Primary Operations.	Percentage of Success in Primary Operations.
Bengal (including Calcutta)	{ 1882 1,261,425 1883 1,361,332	1,247,277 1,350,519	98·60 98·66
Assam	{ 1882 58,537 1883 88,693	57,619 88,123	89·40 86·66
North-West Provinces and Oudh	{ 1882 672,463 1883 649,067	653,669 628,338	91·60 92·11
Punjab	{ 1882 499,697 1883 633,062	496,800 624,873	95·11 94·22
Central Provinces	{ 1882 433,691 1883 421,542	419,441 409,636	97·21 97·19
British Burma	{ 1882 55,626 1883 73,269	Not given.	85·34 84·48
Berar	{ 1882 110,291 1883 86,721	110,009 86,471	91·6 92·69
Madras	{ 1882 691,133 1883 753,589	649,485 736,062	92·6 92·7
Bombay	{ 1882 858,711 1883 883,839	792,206 820,065	90·15 95·69

VACCINATION AND  
SANITATION.  
Bengal.

Good progress was made by the Vaccination Department, and new areas, with a population of about 3,800,000, were brought under protection, the total population under protection being about 15 millions at the end of the year. The Compulsory Vaccination Act was extended to fifty-six towns. Little opposition to it was made, except as before in Gya, and here it was based on religious grounds. The most interesting feature in the year's administration was the increased resort to bovine lymph. It is always at hand, and gave a higher per-centage of success. The total expenditure on vaccination for 1883 amounted to 13,127 l.

Sanitation.

Inquiry was made into the causes of a severe outbreak of cholera at Gya during the year, but little was ascertained, although the general opinion that cholera in Bengal spreads irrespective of lines of traffic and of the prevailing winds, was to some extent fortified. Several schemes for improving the drainage of large fever-smitten areas were inaugurated and taken in hand, while some further progress was made with the Cuttack system. In the Sonthal Pergunnahs the great swamp to the south of Rajmehal, which has long been a dangerous source of disease, was surveyed with a view to improve its drainage. But it is doubtful if anything can be done in view of insufficient funds and the apathy of the local landowners. The Burdwan water-supply was nearly completed; that at other towns much improved. It is satisfactory to note that the per-centage of municipal income expended on sanitary works rose from 31 to 34, while it was 18 upon roads. The money was chiefly spent upon conservancy, drainage, and water-supply.

Assam.

Vaccination is making fair progress in Assam, the number of persons vaccinated having risen this year from 57,839 to 88,693, nearly all of these being primary cases. But there is a great mass of religious prejudice in Assam, which there seems no chance of overcoming. The Goshain priests, who have great influence, invariably levy fines from their followers who submit to vaccination; and a strong preference for the older method of inoculation exists among other sections of the population.

Municipal and town expenditure on sanitation increased remarkably. The chief single work carried out was the new water-supply for Shillong, which has provided that station with pure and abundant water. The boon was much appreciated by the native population. A similar scheme is in progress for Gauhati. The first sanitary need everywhere in Assam is a good water-supply.

N. W. Provinces  
and Oudh.

Though the returns of the Vaccination Department show a lower per-centage of successful operations, the change is only nominal and due to corrected entries. Vaccination has now been made compulsory in the cantonments of Meerut and Benares. In Cawnpore and Lucknow proposals to enforce the Act were negatived by the municipal committees, and the first municipality to which it has been extended in the provinces was Sultanpur. The municipalities were active in sanitary work, chiefly with regard to drainage and water-supply. Those at Dehra and at Saharanpur have under consideration large loans for carrying out works of this description. Inquiries are being made into a system of water-supply at Lucknow as well, and at Agra borings have been begun for an artesian well.

Punjab.

Vaccination work in the Punjab made an immense stride, the provincial establishments having been replaced by district establishments. Over 133,300 more people were operated on than last year. There are said to be decided indications that the old prejudices against vaccination are gradually giving way. The Municipal Committee of Amritsar, indeed, applied to have the Compulsory Vaccination Act extended to that town; the request is still under consideration. The Native States are also devoting greater attention to promoting vaccination. The expenditure on sanitary works is steadily increasing in most towns. Lahore will shortly be supplied with a new reservoir for storing drinking water; and the drainage system of that city has also been improved. A covered tank was completed at Deoband, and a scheme prepared for draining Sialkot.

Central Provinces.

There is nothing notable to chronicle this year in the Central Provinces under the head of vaccinations. The total number of operations declined, particularly re-vaccinations. A Feudatory Vaccine Department is included under the administrative supervision of the Central Provinces. Regular vaccination was carried on by it in ten Native States. Sanitary work was chiefly confined to cleansing tanks and improving drainage, while two new waterworks at Jubbulpore were opened in July.

The number of cases rose from 55,626 to 73,269, and several Burmese inoculators learnt the practice of vaccination and began successful work. A large number of operations were also performed in addition to these figures by the missionaries. Moreover, the Compulsory Vaccination Act was extended to the towns of Rangoon and Akyab by the votes of the elected municipalities, showing that the precaution is generally becoming appreciated. Nevertheless, as the total number of successful vaccinations can hardly exceed 80,000 a year, and as the population probably increases by 160,000 annually, Burma cannot be said to be well protected against small-pox. As regards sanitation, the Burmese as yet evince but little interest or belief in it. Only in the towns is any progress made. Rangoon has an excellent water supply, and that at Prome is being improved, while the lower quarters are being embanked against the river.

VACCINATION  
AND SANITATION.  
British Burma.

The vaccination staff was revised and re-arranged during the year, a process which, while it should secure greater efficiency in the future, somewhat interfered with its working; fewer operations were performed in consequence; but the percentage of success obtained was greater. The people of Berar show no active opposition to vaccination, but are apathetic in taking advantage of it. The municipal towns are beginning to show activity in sanitary matters, but the condition of the villages is very backward. Overcrowding and the stalling of cattle in or adjoining dwelling-houses both form the subjects of complaint.

Berar.

The year showed progress as regards vaccination, but not sufficient to keep pace with the growth of the population. There was an increase of 88,926 persons vaccinated, and a rise in the percentage of successful cases. But infantile vaccination is still very backward. Only 104,017 children under one year of age were vaccinated, against 738,388 births registered. No very notable changes or undertakings appear under the of head sanitation. But the proportion of municipal income devoted to sanitation increased from 31.0 per cent. to 33.2, showing greater activity under every head. Some municipalities are beginning to undertake private scavenging with good results.

Madras.

Vaccination made another advance this year; the increase being very noticeable among the native troops. Much, however, still remains to be done to protect the Presidency adequately against small-pox. In only Bombay and Karachi has the Compulsory Vaccination Act been in force for any time. Sanitary improvements make slow way, but this year the various municipalities expended 114,890 on conservancy alone. The principal difficulties are water supply and drainage, about which many of the municipalities seem to entertain very rudimentary ideas.

Bombay.

Two special Cholera Commissions visited India during 1883-84, and their reports expressed widely divergent views. Both confined their investigations mainly to Calcutta, and were accommodated with the use of the laboratory of the Medical College. The first Commission, dispatched from Germany and headed by Dr. Koch, arrived in Calcutta in December 1883. As a result of their inquiries the German doctors agreed that they had discovered a bacillus peculiar to cholera, which was never absent in cases of cholera, and never present in other diseases. This cholera bacillus, in their opinion, was destroyed in an acid medium, and was therefore inert in the stomach of a healthy man or animal. They cultivated the bacillus accordingly in various media, but all endeavours to produce cholera by it were unsuccessful. Nevertheless they maintained that the bacillus was the cause of cholera, and its occurrence in a tank round which cholera cases had taken place led to the conclusion that it was distributed chiefly through the medium of drinking water. Later in 1884 a second Commission, consisting of Dr. Klein and Dr. Gibbes, arrived from London in order to test the accuracy of Dr. Koch's conclusions. The report of this second Commission controverted Dr. Koch's statements at all points. Comma-bacilli were found to exist in the intestines of persons suffering from other diseases besides cholera, such as epidemic diarrhoea and dysentery, and, moreover, were not found to be present in such numbers and frequency in acute cases of typical cholera, as Dr. Koch had asserted. Further inoculations with the bacillus had no effect upon the health of animals, while, as regards its presence in water, no cases of cholera were found in the squalid bustees round several tanks where the water, used for drinking and other purposes, swarmed with the organisms.

CHOLERA C  
MISSIONS.

## XIV.

## EMIGRATION AND IMMIGRATION.

EMIGRATION  
AND IMMIGRA-  
TION.  
EMIGRATION.

THE most important administrative measure under the head of emigration was the Amended Colonial Emigration Act (Act XXI. of 1883). Except, however, in respect of the power to make rules it has not yet come into force, and colonial emigration was regulated according to the previous Act of 1871. But a uniform emigration season, from the 7th July to the 31st January, was fixed for all colonies west of the Cape. Eight emigration agencies were at work during the year, with depôts in or near Calcutta; six for British colonies, and one each for French and Dutch possessions. The number of statute adult labourers demanded and dispatched to the several colonies was as follows:—

1883-84.

	Under Requisition.	Dispatched.	In excess of Requisition.	Short of Requisition.
	No.	No.	No.	No.
Demerara - - - -	6,000	2,537	- - -	3,463
Natal - - - - -	1,324	475	- - -	849
St. Lucia - - - -	775	- - -	- - -	775
Trinidad - - - -	3,205	2,470	- - -	734
Fiji - - - - -	2,100	1,401	- - -	698
Mauritius - - - -	990	1,135	145	-
Guadeloupe - - -	900	885	- - -	15
Surinam - - - -	1,800	1,355	- - -	445
<b>TOTAL - - - -</b>	<b>17,094</b>	<b>10,260</b>	<b>145</b>	<b>6,979</b>

The number registered in the previous year was 16,502, and the number dispatched, 8,352, when the total deficiency was nearly 1,400 more. The difficulty of procuring labourers in 1882-83 was continued into the earlier months of this year. But after the short rains and scarcity in Bengal, and especially Behar, the offers of the recruiting agents proved more tempting. Of the total number of emigrants, over 6,000 came from the North West Provinces, over 5,500 from Bengal and Behar, and nearly 3,000 from Oudh. The obligatory proportion of women to men was more than maintained, and the average health during the period of detention in the depôts improved. Regulated emigration from Madras also showed 6,659 emigrants divided amongst Mauritius, the Straits Settlements, Natal, Martinique, and Guadeloupe. As regards the large emigration from Madras to Ceylon and British Burma, the figures are the lowest recorded for the last 10 years. The chief causes contributing to this were, the favourable character of the season, the precarious condition of coffee cultivation in Ceylon, and the cessation of the subsidy paid by the Government of Burmah.

The total number of emigrants, including those to the colonies, who quitted the Presidency was 56,116, against 75,250 in 1882-83. Sixty-three per cent. of these went to Ceylon. The number of immigrants again declined from 62,776 to 57,547. It was large enough, however, to turn the balance in favour of immigration.

New rules and forms in agreement with those of Assam were issued by the Bengal Government under the Inland Emigration Act of 1882. There were 3,370 authorised agencies of all sorts at work during the year, and 21,958 persons were recruited for the tea-gardens. But, besides these licensed agencies there

EMIGRATION.

there is an active recruiting system independent of the Act. Under this unplicensed recruiters collect labourers and take them to Assam without registration or Government assistance. They are then put under the Assam Labour Immigration Act at Dhubri, or on the gardens, as locally-recruited labourers. The total number of immigrants into Assam under both systems amounted to 32,138. IMMIGRATION.

British Burma is the largest field for immigration in India, and according to the census of 1881 no less than 14.50 per cent. of the total population had been born outside the Province. More than half of this immigrant population has come in from Upper Burma, and 68 per cent. were men, showing that the immigration is largely composed of labourers attracted by the high rate of wages. The influx from Upper Burma was larger than ever this year, owing to the failure of the last winter's harvest, and the continued disorders. Ordinarily the immigrants enter British territory by railway to Prome, a smaller number also making use of the Flotilla Company's steamers down the Irrawaddy. This year, however, a number of immigrants, many in a miserable condition, made the journey on foot or by means of rafts. The railway passengers down to Prome numbered 175,946, against an average of 146,586 for the previous two years. As regards immigrants by sea, the Burmese Government discontinued the subsidy paid for deck passengers during the year, and the higher rates in consequence have had the effect of diminishing the immigration in the closing months. But the total number of immigrants for the whole year 1883-84 was, nevertheless, the largest ever known. It amounted to 83,045, of which Madras supplied 63 and Calcutta 27 per cent. Emigrants during the same period numbered 45,088.

## XV.

## E D U C A T I O N .

E D U C A T I O N .

EDUCATIONAL organisation in India forms a continuous system, mounting up from the primary school to the university, the maximum standard of one grade of school, roughly speaking, reaching the minimum standard of that immediately above it. Local differences are still conspicuous in the various Provinces, but since 1855 a progressive degree of uniformity has been introduced. The classification of educational institutions is now everywhere threefold: (1), departmental, being those which are entirely maintained by the Government; (2), aided and inspected, those which are supported by private enterprise, but which receive aid from the Government grant, and are inspected by officers of the Department; (3), extra-departmental, of which the Department has no cognizance. - These last may either be privately supported institutions, which are independent of Government assistance, or indigenous schools not yet brought under the grant-in-aid system. The head of each Provincial Department is styled Director of Public Instruction. Subordinate to him are a staff of inspectors and teachers of various grades. The funds at the disposal of the Education Department fall under five heads: (1), the Imperial grant; a portion of the assignment to the Local Governments is expended on education, subject to definite regulations; (2), local cesses; (3), municipal assignments; (4), fees; (5), subscriptions and donations. Broadly speaking, the main object of educational policy in India of late years has been the improvement and extension of elementary education. It was this point to which the attention of the Education Commission of 1882-83 was especially directed.

Starting from the top of the educational organisation; *i.e.*, the universities, and working downwards, it will be easy to see how the different parts of the system are linked together. The Universities of Calcutta, Madras, and Bombay are purely examining bodies founded upon the model of the University of London. They perform no teaching, but by means of their examinations exercise a general control over the colleges which prepare students for degrees, and through them over the higher secondary schools which send up candidates for matriculation. Degrees are conferred by the universities in the four faculties of Arts, Law, Medicine, and Engineering. During the year under review the new Punjab University took its place by the side of the other institutions. Its first convocation for the conferring of degrees was held in December 1883, and it is rapidly attracting to itself the support hitherto given by the Punjab to Calcutta University. The colleges, which were originally independent of the universities, have now been affiliated to them, and may practically be regarded as their teaching branches. Admission into them is confined to those who have matriculated at the university, and the curriculum is adapted to the university examinations. Next come secondary schools, classified into: (1), high schools, which prepare for the matriculation examinations of the universities; (2), middle schools, which are sub-divided again into middle-English, in which English is compulsory, and middle vernacular, in which it is voluntary. Below these come primary schools, in which the standard varies from the preparatory requirements of secondary education down to the most elementary instruction. Supplementary to these are the professional or technical schools attached to primary and secondary education. The majority of these are normal schools for training masters and mistresses; but there are also industrial and engineering schools. It remains to mention the Oriental colleges, which are independent of the general system, and which numbered 11 in 1882-83. Their main object is the study of the Oriental classics according to Oriental methods.

In the following table the total receipts and expenditure on education in India for the two last years will be given, together with the total number of schools and scholars.



\* RECEIPTS.

Year.	Schools.	Scholars.	Government Grants and Provincial Revenues.	Endowments and Subscriptions.	Municipal Funds.	Local Rates and Cesses.	Fees and Fines.	TOTAL.
			£.	£.	£.	£.	£.	£.
1882-83	111,237	2,790,081	740,126	437,381	63,950	347,376	516,925	2,105,647
1883-84†	114,020	3,015,432	720,853	435,019	77,082	369,401	561,200	2,164,916

\* EXPENDITURE.

Year.	Universities.	Colleges.	Normal, Technical, and Special Schools.	Secondary Schools.	Primary.		Miscellaneous.	Direction and Inspection.	Scholarships.	Buildings.	TOTAL.
					Boys.	Girls.					
1882-83	17,591	172,082	111,766	492,540	808,834	103,519	40,317	171,735	6,139	123,830	2,105,647
1883-84†	21,898	179,226	114,649	631,338	734,683	83,078	49,227	179,272	53,602	117,940	2,164,912

\* See Statistical Abstract, No. 19.

† Ajmere excluded for 1883-84.

\* The educational system is seen in its most complete development in Bengal where, since 1872, rapid progress has been made in extending the grant-in-aid system to primary schools. The following table exhibits the comparative statistics of education in the Presidency for the last two years :

EDUCATION IN BENGAL.

	1882-83.		1883-84.	
	Institutions.	Pupils.	Institutions.	Pupils.
Departmental	576	32,060	373	35,080
Aided and Inspected	70,329	1,278,426	67,310	1,332,301
Extra-Departmental	2,883	29,735	2,575	25,228
<b>TOTAL</b>	<b>73,788</b>	<b>1,340,827</b>	<b>70,258</b>	<b>1,392,609</b>

N.B.—The apparent decline in the number of schools is largely due to corrected classification.

These figures show that, of all the children of school-going age in Bengal, about 1 in 4 boys and 1 in 75 girls attended school.

Thirty-five candidates for honours were successful at the Calcutta University M.A. examination, and the B.A. was passed by 205 out of 441 candidates. Twelve of these were Mahomedans. There were 13 colleges open during the year, seven of which were unaided. Women were admitted to the Medical College for the first time this year, and the classes worked satisfactorily. Two scholarships to be held by natives of Bengal were established at the Royal Agricultural College, Cirencester, in the interests of veterinary science. Secondary education showed an increase of 31 schools and 5,796 scholars during the year. The total number of pupils in the secondary schools amounted to 156,406, of which 61,702 were in middle-vernacular schools. Primary education underwent a more rapid development. There was a total increase of 1,165 schools for native boys and of 69,798 pupils. The total expenditure on education was 755,100 l., out of which Government contributed 294,200 l.

EDUCATION.  
Assam.

There is no college in Assam, the wants of higher education in the Province being supplied by an unusually liberal establishment of scholarships, which take successful candidates from the high schools to the Bengal colleges. Boarding-houses have been recently attached to these schools, and found very useful in spite of caste prejudices. The number of schools in Assam rose during the year from 1,856 to 2,106, and the number of scholars from 56,831 to 63,942, of whom only 7,084 were in unaided schools. The total expenditure on education rose from 34,922 *l.* to 41,157 *l.* Female education made some progress, but is still in its infancy.

N. W. Provinces  
and Oudh.

The standard for departmental examinations in the North West Provinces and Oudh was lowered during the year, as it had obviously been pitched too high, and the results of the change were satisfactory. Education steadily progressed during the year both as regards the number of schools and scholars. College classes were opened in the Bareilly High School, and some idea is entertained of reconstituting it as a college. Comparative statistics of education in the Province are given for the last two years.

EDUCATION in NORTH WEST PROVINCES and OUDH.

	1882-83.		1883-84.	
	Institutions.	Pupils.	Institutions.	Pupils.
Departmental - - -	6,054	210,651	5,959	217,290
Aided and inspected - - -	878	20,732	268	18,549
Extra-Departmental - - -	70	1,690	45	1,601
TOTAL - - -	6,502	233,073	6,272	237,440

The total expenditure was 229,493 *l.*, of which 171,499 *l.* was derived from provincial revenues. The proportion of boys of school-going age receiving instruction in public schools, however, was only 6·8 out of every 100.

Punjab.

No exact statistics are furnished for this year of the large number of indigenous schools, Sikh, Hindu, and Mohammedan, which lie outside the influence of the Education Department in the Punjab. Substantial progress, especially in secondary education, was also made in institutions that lie within its sphere. The number of scholars was nearly 10,000 in excess of those of the previous year.

	1882-83.		1883-84.	
	Institutions.	Pupils.	Institutions.	Pupils.
Departmental - - -	1,778	98,978	1,850	107,943
Aided and inspected - - -	855	17,292	377	17,633
TOTAL - - -	2,133	116,270	2,227	125,576

The total expenditure was 167,327 *l.*, of which 65,000 *l.* came from Provincial Revenues. Female education makes best progress in this Province among the Sikhs.

Central Provinces.

Education in the Central Provinces is now passing under the control of district and municipal bodies. The population is generally backward, but considerable improvement has been made in recent years. No indigenous schools unconnected with the Department are said to exist. The number of primary schools rose during the year from 1,457 to 1,511, and secondary schools from 56 to 61. The total number of scholars in the Province increased to 93,669, and the total of expenditure was 68,462 *l.*

The

The educational system of British Burma is peculiar. Elementary instruction is given both to boys and girls in every Buddhist monastery, and these monastic schools are independent of Government support. The consequence is, that the proportion of pupils to the total population is very high, and expenditure upon education unusually low. Schools in the towns have now been brought under the control of the municipalities, subject to inspection by the Department. It is proposed to establish a college at Rangoon, where college classes have been started with success in the high school. The number of primary schools inspected in 1883-84 rose from 3,857 to 4,668, and the number of scholars from 105,407 to 125,626. The educational position of Burma is here given.

EDUCATION.  
British Burma.

	1882-83.		1883-84.	
	Institutions.	Pupils.	Institutions.	Pupils.
Government - - -	51	3,996	33	4,169
Aided - - - - -	1,014	42,294	1,226	63,347
Unaided but inspected - -	2,844	60,826	3,414	70,116
TOTAL - - -	3,909	107,106	4,673	127,632

The total expenditure for the year was 71,302 l.

The system of education in Ajmere is similar to that obtaining in the North West Provinces, to which Ajmere was formerly attached. The total number of students was 7,343, and the expenditure on education came to 6,346 l.

Ajmere.

In an agricultural country like the Hyderabad Assigned Districts an unfavourable year, such as was experienced in 1883-84, must naturally have injurious effects upon education. As a consequence we find that the number of schools fell off by 38, and the number of pupils by 468, leaving 842 institutions and 35,810 scholars at the close of the year. The great majority of these schools were departmental and primary.

Berar.

In Coorg the educational organisation is almost entirely departmental, although the High School at Merkara is administered by the Basel Mission. Education made fair progress during the year; the number of pupils rising from 3,385 to 3,471.

Coorg.

The large European and Eurasian population in the civil and military station of Bangalore has special educational requirements. The proportion of girls' to boys' schools, 25 to 41, is in consequence unusually large. Out of a total number of 3,589 pupils in 1883-84, 1,282 were Europeans or Eurasians, and 1,193 were girls.

Bangalore.

A new set of bye-laws regulating the conduct of business, and the conferring of degrees, was sanctioned for the Madras University during year, and a scheme of studies for a new Bachelor of Science degree was drawn up. The general position of education in Madras, the "most instructed" Presidency in India according to the last census, may be gathered from the following table:—

Madras.

	1882-83.		1883-84.	
	Institutions.	Pupils.	Institutions.	Pupils.
Departmental - - -	1,585	60,443	1,438	58,517
Aided - - - - -	9,618	266,084	9,133	275,510
Extra-Departmental - -	6,291	119,797	5,508	113,754
TOTAL - - -	17,494	446,324	16,139	447,781

76 STATEMENT EXHIBITING THE MORAL AND MATERIAL

EDUCATION.

The number of primary schools increased satisfactorily during the year. The total expenditure rose from 374,951 l. to 396,557 l., of which 107,501 l. came from provincial funds and 62,934 l. from local funds.

Bombay.

Education in Bombay is rapidly becoming more self-supporting. In five years the number of scholars has risen from 275,133 to 413,341. But the additional expense entailed on Government since 1878-79 was only 8,644 l. The Muhammedans are becoming more sensible every year of the advantages of having their sons taught Marathi instead of Urdu, and are abandoning their exclusiveness; 51,839 Muhammedans were receiving instruction this year, against 46,281. Special causes retarded the progress of education during the year. Chief among these was the unusual number of marriages which were celebrated, as this year (1885-86) the planets will be unpropitious to matrimony. The total expenditure amounted to 402,190 l., of which 118,907 l. was contributed by the provincial revenues.

	1882-83.		1883-84.	
	Institutions.	Pupils.	Institutions.	Pupils.
Departmental - - -	4,203	276,016	4,500	288,129
Aided - - - - -	433	27,619	461	30,908
Under regular inspection -	1,502	86,951	1,624	94,304
<b>TOTAL - - -</b>	<b>6,138</b>	<b>389,986</b>	<b>6,585</b>	<b>413,241</b>

EDUCATION OF SPECIAL CLASSES.

The education of native chiefs and nobles naturally stands somewhat apart. They have, as a rule, no inducement to qualify themselves for the Government service by passing examinations, and the education they need is one that will encourage them in manly tastes, and fit them for their administrative duties. The two principal institutions in India which meet this demand with success are the Rajkumar College, in Kathiawar, founded in 1871, and the Mayo College, in Ajmere, founded in 1875, for young chiefs of Rajputana. Both colleges are in a flourishing condition, and the pupils have taken readily to English athletics. Thirty-six chiefs and thakurs were on the roll of the Rajkumar College in 1883-84, against 35 in 1882-83; among the new arrivals being a brother of the Rao of Cutch and the eldest son of the Raja of Rajpipla. The Girarsia School at Wadhwan, which is modelled on the Rajkumar College, but draws its support from a slightly lower social stratum, is also doing well. The Mayo College numbered 68 pupils, every Rajputana state except three being represented, while pupils also came in from the Punjab and from Central India. A memorial statue of Lord Mayo was set up during the year, and the balance of the subscriptions, amounting to nearly 1,900 l., presented to the college by the subscribers. The Punjab also possesses a Wards' School at Umballa, where 11 minors are being educated, which it is proposed to develop on the lines of the Mayo and Rajkumar institutions.

LITERATURE AND THE PRESS.

Bengal.

Owing to the unusual political excitement occasioned by the Ilbert Bill controversy, the circulation of the newspapers in Bengal increased considerably during the year, while 10 new vernacular papers were established, bringing the number up to 65. The largest circulation, however, reached by any paper, a weekly one, was not above 12,000. The number of books received by the Bengal Library was the largest on record, exceeding the average of former years by 67 per cent. The principal subjects treated were religion, fiction, and biography. A Hindi drama of the year describes India as a miserable place to live in, on account of the increasing prevalence of sickness and malaria, the rise in the price of food-stuffs, and the multiplication of taxes. Assam has now two newspapers, which are described as doing useful work. Out of 10 books published in the year, seven were religious. One hundred and forty-two vernacular papers were published in the North-West Provinces and Oudh, Punjab, Central Provinces, and Central India, taken together, of which 69 belonged to the North-West Provinces. Nearly all treated of the same class of topics, and

N. W. Provinces and Oudh.

and in much the same manner. Religious and social questions largely engaged their attention; re-admission to caste after foreign travel, re-marriage for widows, and other liberal movements were advocated. On the whole the press is said to have shown a marked increase in ability, but the tone towards European residents underwent no improvement. Religion, law, and language were the three subjects which, as usual, comprised the great majority of native publications. But nothing of striking interest appeared. Burma is practically without a vernacular press; the newspapers being either directed by missionaries or technical registers of shipping, &c. Religious treatises and the dramatic works chiefly went to make up the total of 220 vernacular publications. Among 59 dramatic publications was a translation of the "Merchant of Venice" into Karen.

LITERATURE AND  
THE PRESS.

British Burma.

Literary and publishing activity is gradually developing itself in the Madras Presidency. Eight hundred and eighteen publications were registered this year, against 731 in 1882-83, of which 55 were periodicals. Out of these, 361 discussed religious questions; language and the drama coming next in the popular estimation. As in Bengal, the political excitement of the year stimulated journalism in the western Presidency. Twenty-six new vernacular papers were added to the 116 already established, which are roughly divided between Marathi and Gujarati. The Ilbert Bill controversy excited much interest, but was treated with greater moderation than in Bengal. Among books may be mentioned a good biography of Sir Salar Jung, lives of Socrates and Garibaldi, with translations of several of Shakespeare's plays into Marathi. An account of her travels, written by a learned Brahmin lady, who had been across the sea, was largely sought after.

Madras.

Bombay

## XVI.

## NATIVE STATES AND FRONTIER RELATIONS.

## NATIVE STATES.

FROM an administrative point of view the Native States may be divided into two classes: those which are in direct relation with the Supreme Government, and those which are in connection with the various provincial governments. The Supreme Government maintains direct relations with the four great States of Hyderabad, Mysore, Baroda, and Kashmir, and also with the two groups of States and principalities known as the Central India Agency and the Rajputana Agency. The population, according to the Census of 1881, the revenue in round numbers, and the area of the first four States, are here exhibited. In Kashmir, to which the Census was not extended, the population is only roughly estimated.

	Area in Square Miles.	Population.	Revenue.
			£.
Hyderabad - - - - -	81,807	9,845,594	4,000,000
Mysore - - - - -	24,723	4,106,188	1,000,000
Baroda - - - - -	8,570	2,185,005	1,000,000
Kashmir - - - (Estimate)	80,000	1,500,000	800,000

THE CENTRAL  
INDIA AGENCY.

This designation comprises a group of States placed under the charge of the Agent to the Governor General for Central India, which lie between the Satpura Mountains on the South and the River Jumna on the north, stretching east and west to Benares and Rajputana. The entire agency is divided into eight subordinate agencies, and the total area of the States is 75,059 square miles, with a population of 9,261,907. There are in all 70 chiefships. The year under review was an uneventful one.

The rainfall all over the Central Agency was capricious and below the average, especially in Gwalior; on the whole, however, the harvests were not generally unsatisfactory. But in Gwalior, and also in Bundelkhand, the scarcity which seemed imminent for some months led to a serious increase in violent crime. The British Mail was robbed between Gwalior and Goona, and extensive depredations were committed by the noted outlaw, Bunkaji. Measures were taken to reinforce the police organisation, which have borne good fruit. Two of the principal objects kept steadily in view by the political officers in Central India are, persuading the chiefs to give up the system of transit duties which fetter trade, and the improvement of communications and public works. Some progress was made under the first head; three prominent states, Rajgarh, Narsingharh, and Kilchipur, besides some smaller ones under the Bhopal Agency, have given up all transit dues except on opium. Moreover, Her Highness, the Begum of Bhopal, has promised to consider the question as soon as the condition of the State's finances will permit. The Indore opium-market has recently been passing through a kind of crisis. In consequence of the enormous crop of 1881-82, it became completely glutted, prices went down, stocks accumulated, and but for timely assistance from the Maharajah's Treasury, many firms of old standing would have been ruined. A gradual recovery has since taken place, but, as far as manufactures are concerned, things are not much better. A suggestion has been made that, in order to be able to sell at all under these conditions, merchants largely adulterate the drug. But there is little evidence to support this.

With regard to public works, the Central India Administration suffers from a chronic deficiency of funds, as the Native States are somewhat slow to realize their

their importance, and come forward with the necessary contributions. The most important step made was the completion of the Bhopal State Railway. But the project of carrying it through Lallatpur and Jhansi, to join a prolongation of the Sindia State Railway, was hung up pending the Report of the Railway Commissioners in England. This continuation would bring an extensive wheat area into the railway system. On the other hand, the functions of the Jhansi-Manickpur Railway, in process of construction, are expected to be rather preventive than commercial. This line will traverse a part of Bundelkhand very liable to drought. Closely connected with the problem of railway extension in Central India is the question of developing the Rewah coal-mines. The working plan was inaugurated during the year, but further experiments indicated that the extent and quality of the coal surpass former anticipations. Further building of the Daly College was suspended for several months, till the stability of the whole design could be reported on. It has not been resumed. A suitable boarding-house for boys attending the Rajkumar College is much needed, but there are no funds. A large amount of work was done during the year in connection with boundary disputes, which very often tend to become extremely acrimonious, and to unsettle the country. As careful maps are now drawn up in all cases, the decisions are expected to be final.

NATIVE STATES.

The effect of a threatened scarcity in producing a recrudescence of violent crime in the Maharajah Sindia's dominions has already been noticed. Repression is especially difficult, as the wild country bordering on the North-Western Provinces is much broken up by ravines. Political relations with the State remained excellent, but the transaction of business with the Darbar was much impeded by the Maharajah's illness. His government, in fact, tends to become much too central and personal, and when his initiative is removed everything is in abeyance. Gwalior is backward as regards public works, and it is therefore satisfactory to record that its ruler this year agreed to pay 5,000 l. annually in future for the repair of roads. Though the sum may be inadequate it marks the recognition of important duties. The chief event of the year was a visit the Maharajah received from the Lieutenant-Governor of the North-Western Provinces. As in Gwalior, the administration of the Indore State suffers from undue centralisation, and it is much to be desired that the Maharajah should delegate some of his power to a responsible minister. A good deal of difficulty was experienced with regard to the attitude the Maharajah assumes towards the guaranteed Thakurs and landholders, whose right she is inclined to encroach upon to an extent not compatible with their political dependence on the British Government. Indore is exceedingly backward, as far as public works are concerned, and the Maharajah's financial policy with regard to its growing trade is not always prudent. The State afforded valuable assistance in the efforts of the Central Provinces police to capture the notorious Dacoit, Tantia Bhil. Relations with the Begum of Bhopal have as before been conducted in the most cordial manner, but since she has withdrawn from public life there is some apprehension that she may lose touch with her people. The arrear contributions on account of her Bhopal State Railway have been paid up, but neither the land nor opium revenues of the State were in a very satisfactory condition. Considerable success was met in pacifying and registering the Moghias, a predatory tribe, who have acquired an unenviable notoriety.

Gwalior.

Indore.

Bhopal.

Public works are making real progress in Baghelkhand, and the council of Sirdars took an active and intelligent interest in the administration. The young Rajah of Rewah is delicate, but gives considerable promise, and Dr. Goldsmith has been appointed his tutor.

Baghelkhand.

Boundary disputes in Bundelkhand were very prominent and difficult. The work of this agency, which involves much minute supervision from its peculiar circumstances, is unusually heavy.

Bundelkhand.

The two principal States under the Western Malwa Agency are Dhar and Jaora. The affairs of the latter have for some years been drifting into confusion, and at the instance of the Political Agent the Nawab consented to appoint a responsible minister. Syed-Hadi Husain, Ex-Judicial Assistant Commissioner of the Punjab, was nominated to this post, and, under his advice, there is every expectation that things will now improve.

Western Malwa.

The Rajputana Agency includes 20 States, of which 17 are Rajput, one Mahomedan, and two Jat. They occupy a region extending from Guzerat on the south to the Punjab on the north, and bounded east and west by the Central

RAJPUTANA AGENCY.

## NATIVE STATES.

India Agency and by Sind. The total area of the agency is 129,750 square miles, and the population 10,268,392, an average density of only 97 per square mile. There are eight subordinate agencies. Like the Central India Agency the States of the Rajputana Agency were threatened during a part of the year with scarcity, which was fortunately averted. Inquiries which were made as to the means and organisation for relieving the anticipated distress met with satisfactory answers. Many improvements were carried out in the various States, particularly with regard to extending irrigation and communications, and liberating traffic from vexatious transit dues. But the event which caused the most excitement was the disturbance in Bickaneer. Here the old quarrel between the Maharajah, whose administration has not been satisfactory, and the Thakurs, broke out in an aggravated form. The Maharajah endeavoured to insist upon an enhancement of the payments due to him in commutation of military service; on the other side, the chiefs revived old claims against him, many of which were extravagant. Finally, three of the Thakurs threw off their allegiance, treated the representations of the Political Agent with disrespect, and entrenched themselves at Bidasur. As the only means of pacifying the district the extreme measure was resorted to of marching down a small detachment of Imperial troops under Brigadier-General Gillespie from Nüsseerabad upon Bidasar. This had the desired effect; the Thakurs surrendered unconditionally, and the claims and counter-claims of the Maharajah and chiefs have been accommodated. No other political events of importance occurred.

The opium trade throughout the agency is very depressed, as at Indore. Prices continue low, and merchants are forced to realise at a loss.

The salt agreements have continued to work satisfactorily; the supply throughout Rajputana appears to have been sufficient, and prices are ruling lower since the reduction of the Government duty in 1882. On the whole, there was a general diminution in the more serious kinds of crime, and no disturbances among the Bhils are reported. There were violent dacoities, however, in Meywar, and the Rana of Lohiana, a noted freebooter chief, broke away from Jodhpore, where he was detained under surveillance, riding over 100 miles on a single horse straight into the Soonder country. He has not yet been arrested, but these difficult hills are now patrolled.

The financial administration of Oodeypore was much more successful this year than was expected, and the revenue settlement is practically complete, though the question of rates has still to be determined. Measures have been taken to restore the much-needed tanks which have been left in disrepair since the Mahratta invasions. A marriage has been arranged between the Maharana and a sister of the Maharajah of Jodhpore.

Several minor administrative reforms were carried in Jodhpore, and the financial positions of the State was very satisfactory at the close of the year. The receipts came to 399,572 £, while the expenditure reached 321,856 £, but at least 60,000 £ of this was only a temporary item occasioned by the preparations for the marriage of the Maharaja's sister.

Jaipore suffered somewhat from a deficient harvest and an outbreak of cholera, but no severe distress was experienced. The Maharajah takes great interest in the work of the Government. He paid a visit to Calcutta in December, and in March entertained the Duke and Duchess of Connaught for a few days at his capital.

The relations of the Durbar and the feudatories of the state continue excellent.

The three principal States comprised in this agency all displayed great willingness to allot money for famine relief during a temporary apprehension as to scarcity and have since agreed to devote a certain sum annually for a famine fund, and to maintain reserve stores of grain and grass. The revenue in Boondce showed a serious deficit owing to marriage ceremonies. The Maharao Raja, though he has entered his 74th year, gives unabated attention to the administration.

The contest between the Maharaja and the Thakurs in this State has already been noticed; except for this the year was uneventful; but the judicial and revenue work has fallen into arrears owing to the want of qualified officials.

The Government of Bengal is in political connection with the States of Kuch Behar, Hill Tipperah, the tributary Mehals of Orissa, and of Chota Nuggpore, together possessing a population of 2,845,405 souls, and an area of 36,634 square miles. It also conducts political relations with the independent States of

Sikkim

Meywar.

Western Rajputana.

Eastern Rajputana.

Maraoui Agency.

Bickaneer.

BENGAL.



Sikkim and Bhutan. The State of Kuch Behar, with a population of over 600,000, which had been under Government administration for 20 years, was transferred to the Maharaja Mohendra in October 1883 on his attaining his majority. He received a balance of assets of over 280,000 *l.* During the chief's long minority Kuch Behar has been equipped with a complete organisation for finance, justice, and education. It is to be governed in future by a state council, presided over by the Maharaja. In the Chota Nagpore Tributary Mehals some distress was occasioned by a scanty rainfall, and also by the violence of the Korwas, a robber tribe. The Raja was too weak to suppress them, and finally the assistance of the Commissioner of Chota Nagpore was called in. Five of the nineteen tributary Mehals of Orissa were under direct management. Disturbances occurred in Nilgiri owing to discontent with the action of the Dewan; that officer was ultimately removed after an inquiry, and the services of a European officer lent the Raja at his repeated requests.

The Native States under the political control of the Punjab Government are important, and most of them are held under the conditions of giving military assistance to the British Government when required. It is therefore satisfactory to learn that the Lieutenant-Governor of the Province considers that they are "as a rule," well administered, and without exception distinguished for their loyalty to the British Empire. These states are 34 in number, cover an area of 10,749 square miles, with a population over 3,800,000, possess an aggregate revenue of 1,050,000 *l.*, and pay a tribute of 28,000 *l.* Their history during 1883-84 is happy in being uneventful. Prices were generally low and progress was made with improvements of all kinds. The most notable of these was the opening of the railway which connects the capital of Patiala with the Sindh, Punjab, and Delhi Railway. Much was also done in Faridkot, which is making great strides in material prosperity, in the way of canals and railway development under the able administration of Bikrama Singh. The Raja of Chamba celebrated his eighteenth birthday during the year under review, and was invested with full powers in his state. Kapurthala still remained under direct management during the minority of the young Sikh Raja; he was betrothed during the year to a Rajput lady of the Kangra District. Nothing occurred in the Simla Hill States deserving of special comment.

Properly speaking, there are 15 Native States in political connection with the Central Provinces, though 115 minor chiefships occupy also an anomalous position between feudatories and subjects; these 15 states comprise an area of 28,834 square miles, and a total population of 1,709,720. Four of them were under direct management during the year, and the financial and administrative confusion of another, Raigarh, threatens to bring it into the same category. Of the rest, Khairughah is one of the most important and best governed. Its chief seems fully to appreciate the commercial changes occasioned in the Central Provinces by the extension of railways, and to be resolved to keep abreast of them. Kalahandi also makes good progress.

The two important Native States of Travancore and Cochin, as well as three small chiefships completely surrounded by British Territory, are in connection with the Madras Government. Together they cover an area of 9,538 square miles, make up a population of 3,341,014, and paid 344,643 *l.* to the Imperial Government last year. Travancore, with a revenue of 590,000 *l.*, and Cochin, with one of 147,000 *l.*, resemble each other in physical characteristics, consisting of rice lands, fringing the coast, backed by uplands in which clearings have been recently made by coffee-planters. Both states are well administered under their present rulers. The Maharaja of Travancore was invested with the insignia of a Knight Grand Commander of the Most Exalted Order of the Star of India at Madras. The re-organisation of the Judicial Department in his state was attended with satisfactory results. A similar reform has been carried out in Cochin. Nothing notable occurred in the minor states of Pudukota, Banganapalle, and Saudur.

Excluding Baroda, which is now in direct relations with the Supreme Government, the native states of Bombay occupy about one-third of the whole Presidency. The last census gives their total population at 6,941,249; their total area is 73,753 square miles, and their total contributions to the British Government amounted in 1883-84 to 720,487 *l.* They may be divided into four groups, the states, respectively, in connection with the three divisions of the province, and the Sind Principality of Khairpur.

## NATIVE STATES.

The young Rao of Cutch was married during the year, and admitted to a share in the administration, previous to his taking it over entirely. The council of regency, which has managed the affairs of Cutch for eight years, has been eminently successful. Whereas every year used to bring a serious deficit, the annual surplus now is over 40,000 l.; 1,649 new wells have been sunk, and the number of schools has been doubled. The Lieutenant Governor visited the states under the Mahi Kantha Agency during the year. The record of progress is a satisfactory one; public works are being pushed on, and schools increasing; the same applies to the Kathiawar States, excepting Porbandar, where the Rana is proving himself a careless and obstructive ruler. The Thakor of Morvi visited Europe for eight months, and his brother is at Trinity College, Cambridge. Vaccination and education both made considerable strides.

Status of the Northern Division.

Central Division.

Akalkot still remains under the direct management of Government, but the chief is making progress with his studies at the Rajaram College in Kholapur, and will soon attain his majority. For the third time within 18 years the throne of the important Mahratta state of Kholapur became vacant this year. A council has been appointed, and the religious fears of the people allayed by the ashes of the royal family being sent to Benares for disposal, according to the Shastras. Especial attention is devoted in Bombay to the training of the minor chiefs; nor does this end when they leave the Rajkumar College; their knowledge and experience is often extended by tours through India and even Western Europe, and they are gradually introduced to the work of administration until they can take up its full responsibilities.

Southern Division.

FRONTIER RELATIONS.  
BENGAL.

Except for a slight disturbance in the Chitagong Hill Tracts, the frontier relations of Bengal were uneventful during the year 1883-84. In November, however, of 1883 an attack was made on two boats containing sepoy on the Rangumatti river above Barkal, in which two sepoy and a servant were killed. It was found impossible to fix the guilt of this outrage, though the Syloos were suspected.

Subsequently the frontier was alarmed by rumours of intended Lushai raids, and an extra police-force was despatched from Calcutta. The alarm came to nothing, and later on the Deputy Commissioner held a fairly-well attended Durbar at Rangumatti.

ASSAM.

The raiding of the Akas into Assam was more serious, and it was found necessary to visit it with a punitive expedition into their Himalayan fastnesses as a blockade would have had little effect on a tribe so independent of the plains, while it would have exposed the troops to hardships and malaria. The Akas, who are divided into two clans, "the eaters of a thousand hearths" and "the thieves that lurk in cotton fields," lie in a difficult mountain tract between the Daffla Hills and the region of the independent Bhutia tribes. Since 1841 they had given no trouble, and the chiefs had come down regularly to receive a pension from Government. The alleged causes of their outbreak this year, were dissatisfaction with the extent of a grant of temple-land made them, a boundary dispute, and discontent with the coercion exercised upon them by the forest-officers. The real motive was probably the temptation of finding a hostage ready to their hands, and the calculation that they would be out of reach in their distant hamlets.

The expedition of one Lakhidar, the mauzadar of Balipara, who volunteered to visit the Akkas and collect articles for the Calcutta Exhibition, began the trouble. He was detained by the Akkas, who were then emboldened to attempt to seize the Assistant Conservator of Forests at Balipara. They only succeeded in carrying off his assistants. As they refused to release their captives a force consisting of seven officers and 564 men of the 43rd Native Infantry, three officers and 207 men of the 12th Khelat-i-Ghilzars, assisted by half a company of sappers, and two mountain guns of the Rohat Mountain Battery, were despatched to punish them. Fifty frontier police also accompanied it, and the whole force was under the command of Brigadier-General Sale Hill, C.B., with Captain Maxwell, Deputy Commissioners of the Garo Hills, as Political Officer. The first advance was made by Major Beresford, who repelled a night attack at Maj Bhoroli, but did not find himself strong enough to force the passage of the Tengapani river, till General Hill came up. After this the crossing was easily mastered, and the Akkas, who were insufficiently supplied with poisoned arrows, dispersed. The force soon afterwards retired. It was ascertained that Lakhidar had died in captivity, owing more to privation and anxiety than to actual

actual violence. The other captives were restored. Up to the close of the year the Akka chiefs had not submitted themselves, and till they do, none of the tribe will be permitted to enter British Territory. NATIVE STATES.

Affairs on the Punjab border have been more than usually quiet. The total number of fighting men possessed by the frontier tribes, is now estimated at 170,000 in round numbers. The only collision that took place between the British authorities and the clans was during the surveying expedition to the summit of the Takht-i-Suleiman. A small section of the Shiranis attempted to impede it, but were fired on and driven back with small loss to them and none to their opponents. The temper of the rest was good, although earlier in the year they were blockaded for a short time. In the spring of 1883 it also seemed probable for a time that the Turis would have to be coerced into order. They fought among each other, defied the Ameer of Afghanistan, and raided on the Jajis. It was decided, however, not to interfere. The rest of the tribes carried on their usual feuds and intrigued with varying success against the Ameer. The conduct of the Khyber Afridis was good, and the Pass was effectually guarded by the Khyber Rifles enlisted from among them. PUNJAB.

## XVII.

## MILITARY.

## MILITARY.

THE total established strength of the army in India during 1883-84, according to the official statement accompanying the Budget Estimates for that year, consisted of 189,084 officers, non-commissioned officers, and men. Of these, 63,065 were European, including 310 engineer officers, and 1,244 "miscellaneous officers" serving neither with European nor with Native Troops. The total returned for the Native Troops, 126,019, also comprises 1,464 European commissioned officers and 197 European non-commissioned officers and rank and file. The military expenditure was 16,921,714 £., with an additional charge of 54,036 £. on account of operations in Egypt.

## EUROPEAN ARMY.

The health of the European army was unusually good, the death-rate per mille being only 10·88 against an average death-rate of 19·34 for the decennial period 1870-1879. The total loss per mille to the army from death and invaliding combined fell to 44, or less than the average for the same ten years by 18 per mille. The following statement exhibits the health statistics of the armies of the three Presidencies and of all India for the calendar year 1883.

Command.	Average Strength.	Ratio per 1,000.		
		Admissions into Hospital.	Daily Scale.	Deaths.
Bengal - - - -	34·079	1,463	66	11·21
Madras - - - -	10·498	1,013	59	10·10
Bombay - - - -	10·948	1,249	57	10·50
Army of India - - -	55·625	1,336	63	10·88

Malarial fever, as usual, was the chief cause of sickness among the troops, and next to enteric fever, hepatitis and apoplexy were the principal causes of mortality. But although malarial fever continued to give rise to the largest number of admissions to hospital in Bengal, where about two-thirds of the total army is stationed, a very satisfactory decrease in the admission rate was recorded. It fell from 660 per mille in 1882, and from an average of 607 for the decennial period 1870-79, to as low as 486. The figures for Madras and Bombay are also more favourable. The highest admission rate among the Bengal troops occurred in the Punjab, and the next highest in Meerut and Rohilkhand. The highest death-rate 17·04 per mille is returned from the Gangetic Provinces, Central India and Agra follow with 14·27. Both these ratios are, however, an improvement on former years. Cholera, as usual, was more prevalent in the Gangetic than in the other Provinces, though fewer deaths are assigned to this disease. The Bombay troops in Rajputana and Malwa cantonments enjoyed unusually good health. The death-rate was only 8·32 against an average of 17·41. The admission-rate in the Deccan and Nagpur group again declined, but the death-rate rose from 7·94 to 10·72. Here the principal causes of mortality were enteric fever and cholera. In Southern India the statistics compare somewhat unfavourably with those of the preceding year, but very favourably with the average. In Burma both the admission-rate and death-rate improved. Hepatitis was the most fatal disease; no deaths were due to cholera.

## Enteric Fever.

Enteric fever heads the death-list in all three Presidencies, the highest ratio per mille, 2·86, occurring in Madras, and the lowest, 1·55, in Bombay, while Bengal holds an intermediate position. But though the mortality from enteric fever has increased of late years, the mortality from other fevers has correspondingly exposed. An examination of the year's statistics bears out the conclusion that

young and unacclimatized soldiers are particularly subject to this disease. Liability to its attacks diminishes with length of service. The remarkable, decrease in cholera which was noticed in the preceding year has been more than maintained. Throughout the army only 82 cases were treated, and only 51 of these terminated fatally. These favourable results have been chiefly due to the comparative immunity of the Bengal Army from the disease, as both in Madras and Bombay the seizures were slightly more numerous again. Small-pox, on the other hand, was twice as severe as in the previous year, 105 cases and 9 deaths being registered, against 44 cases and 4 deaths. The increased prevalence of the disease was practically confined to Bengal. Dysentery and diarrhoea were both less general and less fatal. The admission-rate from venereal diseases of all kinds continues to rise steadily. From 1870-79 it was 203 per 1,000; in 1881 it was 260, last year 265, and in the year under review it reached 270. The highest rate, 289, is set down against Madras; in Bombay there were fewer admissions. The total number of admissions for primary syphilis was 5,013, against 4,835 in 1882; the number of secondary manifestations remains much the same. Taking the statistics of the last 14 years, it appears that the admission-rate for venereal diseases in protected stations has been 223 per mille, in unprotected stations 227. The difference therefore is slightly in favour of protected stations. A further analysis of the figures reveals the fact that this result is wholly due to Bombay. In Bengal and Madras the admission-rates in protected stations have actually exceeded those in unprotected stations. In discussing this subject the continuous decrease in the proportion of married men in the army is noticeable.

The lowest ratio of invaliding, 33 per mille, was yielded this year since 1870, with the single exception, 1880. The smallest amount of invaliding took place from the Bengal army, and the largest from the Bombay army. But as regards the seriousness of the causes for invaliding the proportions are exactly reversed. The question of invaliding due to mental disease has lately attracted attention.

The period for which figures are available is too short to allow of any accurate inferences being drawn. But there seems to be a tendency to an increase in mental disease, especially in melancholia with hypochondriasis. Eighty-six cases of invaliding were assigned to mental derangement this year, against 77 in 1882. The strength of newly arrived regiments was small, diminishing from 3,444 to 1,453. Their health was considerably worse than in 1882, enteric fever and apoplexy severally affecting them.

The health of the Native Troops also showed an improvement upon the whole, the death-rate from all causes declining from 14.76 to 14.31, inclusive of absent deaths.

Presidency.	Average Strength.	Ratio per 1,000:		
		Admissions into Hospital.	Daily Sick.	Deaths (excluding absent Deaths).
Bengal - - - -	40,932	985	32	10.55
Madras - - - -	27,703	737	27	10.76
Bombay - - - -	23,576	994	35	12.81
Army of India - -	114,830	923	31	11.76

Malarial fevers again accounted for the largest number of admissions, and respiratory diseases contributed the largest mortality. The death-rate under this head, however, nearly four per mille, approximated to the average. In 1879 and 1880 it was as high as 10 and 12.30 respectively, owing chiefly to the exposure undergone on active service. Next to respiratory diseases fever was the most fatal malady of the year.

About one-third of the native army are included in the Bengal command. Both the death-rate and daily sick rate were the lowest that have been recorded for 27 years. The reduction in the admission rate for intermittent fevers was very striking; it fell from 606 per mille in 1882, and from an average of 691

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NATIVE ARMY.

for 10 years to 398. The mortality from respiratory-diseases continues to diminish. There were only 38 cases of cholera, but they were extremely severe, no less than 23 terminating fatally. Small-pox was the cause of more than twice as many deaths as in the previous year. As regards the geographical distribution of the Bengal Army, the Agra and Central India cantonments really show the most favourable results, for though the admission rate was higher than in the Punjab, the death-rate was less by half. Fevers were most deadly in Lower Bengal and Assam, as also were cholera and bowel complaints. The small body of troops serving in Southern Afghanistan enjoyed much better health this year, while in the Punjab Frontier Force there was less sickness but an increased mortality.

The statistics for the Madras troops are good, especially for the Northern Division of the army. Intermittent fevers as usual were the chief malady. The small detachment in the Nicobar islands suffered very severely from this cause. In the Bombay army the admission rate was somewhat lower and the death-rate slightly higher. The troops serving in Southern Afghanistan suffered most, and the Northern Division came next in order of sickness.

THE AKA EXPEDITION.

During the year a small expedition composed entirely of Native troops was sent into the Aka country; only one death from disease occurred among the force, and this was occasioned by pneumonia. The chief causes of admission to hospital were ague, dysentery, and the bite of the Pipsee fly. The want of socks, and among the frontier police of leg bandages, exposed the men particularly to the attacks of this insect. The Akas among other weapons made use of arrows poisoned with juice from some kind of aconite which grows high up on the Himalayas. There were three undoubted cases of wounds from these missiles, in two of which the sufferers died, while the third recovered.

SANITARY WORKS.

The total amount expended on military sanitary works for 1883 was 673,533 *l.*, of which 269,098 *l.* were devoted to original works. Permanent instead of temporary barracks for two battalions of British Infantry were taken at Lucknow. At Peshawar the old barracks are similarly being improved into permanent barracks, and at Quetta a new cantonment is being built. At Pishin a defensible port has been almost completed, which will afford accommodation for half a battalion of Native Infantry as well as for a detachment of cavalry. At Rawalpindi a large hospital for the Native troops has been erected, and gymnasia have been finished at Delhi and Murree, while one has been begun at Roorkee. Buildings for the commissariat department have been started at the depôts along the Bolan-road. Steam flour mills have been erected at Umballa and Rawalpindi, while the water supply at Peshawar has been completed and that at Umballa is being extended.

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